Issued Every Monday at 450 W. Fort St., Detroit 26, Mich.

> June 7, 1948

Vol. 54, No. 6, Serial No. 1003 Established 1926.

Reentered as second-class matter October 3, 1936 at the post office at Detroit, Michigan, under the Act of March 3, 1879. Trade Mark Registered U. S. Patent Office. Copyright, 1948, by Business News Publishing Co. 11816 LIBRARY

## GEORGE F. TAUBENECK

Story of the Week Fun In Print Case History Good Deed More Chances Statisticians Are Phonies

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#### Story of the Week

Terrified by a violent thunderstorm which rattled the windows around 3 a.m., a little boy of whom 'Dope" is quite fond pummeled his daddy out of a sound sleep.

"Why does it have to rain so hard? What's making all that awful noise?" etc., etc., he queried excitedly.

Daddy, who has an unfortunate habit of answering difficult questions the hard way, dreamed up this dilly:

"Well, son, once in awhile God looks down on Earth and notices that the trees and the grass and flowers are extra thirsty. So he drops down a great deal of water all at once. The clouds bump heads, and that causes all the thunder and lightning.'

The five-year-old boy pondered this flight of fancy for a moment, then bserved:

"I like God, but why is he so care-

#### Fun In Print

Here's a fable in modern dress. It's reminiscent of Aesop's sagacious anecdotes, and it pokes gently into the queasy tummy of the Planned Economy theorists.

There once lived a Farmer who was reasonably contented. But one day he took two chickens into the big city. He hoped to sell these chickens, or exchange them for things he needed. Eventually, he sold them to a Factory Worker and, with the proceeds, purchased for himself two shirts. Thus, the Farmer had acquired two shirts, and the Worker two chickens.

However: this transaction had been witnessed by a bureaucratic representative of the Governmental Planners who, as the saying goes, "wanted to get into the act."

The bureaucrat surreptitiously took the Farmer aside and confided that if he wished to earn more from his chickens, he should make them scarcer. By raising fewer chickens, he was told, he could add to the value of those he sold.

Then, pursuing the old political of "playing both ends against the middle," the bureaucratic representative of the Planners conacted the City Worker, whom he advised to work less hours and demand more pay. In this way, the City Man was advised, he could raise the selling price of the goods he manufactured, and consequently gain more money for himself.

Going along with this Plan, the Farmer sold just one chicken next time he journeyed to the city, and acquired as much money as he previously had for two chickens. This transaction pleased him. How simple it was to get rich, he thought. But when he stopped at the haberdashery to purchase some shirts, he found that those articles had doubled in cost. So he bought only one shirt.

As a result of this political bamboozlement, the Farmer had only one shirt and the Worker had only one chicken; whereas if they had used their own Common Sense, and tossed the Planning Sirens out the back door, each would have had twice as much

Moral: Those who promise something for nothing have holes in their heads.

Concluded on Page 16, Column 2)

#### ASRE Aiming for Revived Interest In Household Systems

SWAMPSCOTT, Mass.-Marked by the heaviest attendance of household refrigerator men in years, the thirtyfifth spring meeting of the American Society of Refrigerating Engineers took over the New Ocean House here for three days last week, May 30 through June 2.

Some 400 members and guests registered for the meeting, which included three technical sessions, outings and sight-seeing tours, the annual golf tournament, a barn dance, and the traditional cocktail hour and dinner-dance.

One technical session was devoted entirely to household refrigerator engineering and production problems. This was a deliberate move on the part of the society to interest the domestic field in the national activities of ASRE. For several years, there have been few papers presented on this subject.

It was indicated also that the society attempt in the future to arrange for frequent presentation of (Concluded on Page 33, Column 2)

#### Water Conservation In Air Conditioning Systems Is Law In Rochester

ROCHESTER, N. Y. - Drastic curbs on the consumption of city water by air conditioning systems have been imposed by the Rochester City Council.

Economies will be effected through enforced installation of conservation devices, required to be installed with all large air conditioning systems, including those now in use.

Such devices, known as cooling towers or evaporating condensers, will effect a 95% reduction in amount of water required, according to Henry L. Schlueter, sponsor of the panel ordinance aimed to compel their use.

Effective June 14, Schlueter's ordinance will require a city permit for (Concluded on Page 36, Column 1)

#### Predict Attempt To **Boost Export Sales** Of Refrigerators

NEW YORK CITY—A campaign to step up sales of its refrigeration equipment in the 16 countries covered by the European Recovery Plan (ERP) was to have been launched last week by an industry manufacturer, according to a report in The New York Times.

The name of the company was not disclosed. It was identified only as "one of the largest American refrigerator producers.'

Immediate objective of the drive is to "persuade each government to grant more licenses and issue larger dollar allocations for imports of both home and commercial refrigeration units-for adequate preservation of increased food supplies," the report

The manufacturer's export manager explained that refrigeration ex-(Concluded on Page 33, Column 2)

#### McShane Will Head Sales for Koch

NORTH KANSAS CITY, Mo. -William R. McShane, purchasing agent since 1945 for Kech refrigerators here, has been appointed sales manager. He has already taken over his new duties.

McShane came to Moch in 1939 after several years with the Smith (Concluded on Page 33, Column 1)

## Dealers Against To Be Increased **Price Cutting**

#### G-E Granted Injunction In Case Involving New York Retailers

NEW YORK CITY - Temporary injunctions against eight New York City appliance dealers who were charged by the General Electric Co. with selling G-E appliances below the fair traded prices established by G-E have been granted by Justice Edward R. Koch of the Supreme Court, New York County.

At the same time, the court denied a cross motion to dismiss G-E's complaint made by Monarch-Saphin Co., one of the defendants. Monarch-Saphin, however, was granted permission to examine G-E officials or employes as to G-E's own sale of its products at retail and its agreements with others to sell those products at fair-traded prices.

Monarch-Saphin had contended that the General Electric Supply Co., a G-E subsidiary, had been the greatest price cutter of G-E products.

The dealers temporarily enjoined, pending final decision in the cases, were: Benco Sales Co., Bondy Distributors, Inc., Buy Wise Merchandise Co., Central Sales Supply Co., T. A. Gary, Heins & Bolet, Monarch-Saphin Co., and Silken Shopping Service.

Drake Home Appliances, Inc., which had also been named in the G-E action, had previously consented to a permanent injunction.

The eight dealers have a choice of appealing the decision, accepting the injunctions and abandoning their defense, or fighting the case.

General Electric officials, after announcement of the court injunctions, expressed the hope that all G-E dealers would henceforth sell at the minimum prices established under the agreements. Failure to do so, they warned, would necessitate further legal actions.

#### **GM-UEW Agreement** Set, Others Hesitate

DETROIT - The General Motors agreement with the United Electrical, Radio & Machine Workers (CIO) providing for a wage adjustment formula and certain contract changes, has not been immediately followed by other electrical appliance and equipment manufacturers. The G-M contract covers six divisions of the company, including Frigidaire and Delco

While General Electric Co. reopened negotiations with the UE-CIO last week, company officials said that the discussions were "purely exploratory," and denied that a wage increase had been offered.

A company spokesman said that "among the things that make the General Motors formula of such doubtful application elsewhere is that the automobile industry had not here-(Concluded on Page 36, Column 1)

#### Minnesota Group **Buys Percival**

BOONE, Iowa-The C. L. Percival Co. of Boone and Des Moines, Iowa, has been purchased by Minnesota investors, and reincorporated as C. L. Percival Co., Inc.

The firm, founded in 1886 by C. L. Percival, was a pioneer manufacturer of commercial refrigerators. The factory in Boone, Iowa, produces walkin coolers, meat, dairy, and open-type cases, wall dairy cases, and special (Concluded on Page 4, Column 3)

# Starting June 26

WILMINGTON, Del.-An increase of approximately 10% in the price of "Freon-12" refrigerant when shipped in cylinders up to and including 145-lb. capacity will become effective June 26, it is announced by Kinetic Chemicals, Inc.

The size cylinders covered are the ones on which Kinetic Chemicals pay outbound freight on filled cylinders and return freight on empty cylinders. There is no change in price for "Freon-12" in 1-ton containers which are sold f.o.b. plants at Carney's Point, N. J., and East Chicago, Ind.

Advances in loading, handling, shipping, and warehousing costs over the past 30 months necessitated the increases, the first upward price adjustment on "Freon-12" since Kinetic started to produce it.

#### ASHVE Program Is Set For June 20-23 Meeting

NEW YORK CITY-Physiological factors in air conditioning, heat storage, and solar heat transmission will occupy members of the American Society of Heating & Ventilating Engineers at the society's semiannual meeting to be held at Bretton Woods, N. H., June 20 to 23.

These themes will form the bases for 10 technical papers scheduled for presentation at morning sessions Monday through Wednesday, June 21 to 23.

Aside from the technical discussions, the society will consider an amendment to its by-laws that would restore the \$25 annual dues rate (present dues are \$18 per year) and revisions to the regulations govern-(Concluded on Page 36, Column 2)

#### Schafer, Conley Take Posts at Coolerator

DULUTH, Minn.—Appointment of Ward R. Schafer as vice president and general manager of Coolerator Co., and William C. Conley, Jr., as sales manager, has been announced by L. W. Hamper, Coolerator presi-

Both Schafer and Conley were formerly with Hotpoint, Inc. Schafer had been Hotpoint divisional sales manager, general sales manager, and vice president. Conley had been nagalog also been with the Potomac Edison

#### Philco Showing New **Portable Conditioner**

PHILADELPHIA-A new portable air conditioning unit, fourth in the Philco line, is now being shipped to dealers in time for the summer season, Walter Eichelberger, sales manager for the refrigeration division, Philco Corp., has announced.

Priced to retail at \$384.50, the unit is designed for use in rooms up to 295 sq. ft. (15 by 19 ft.) with a normal 9-ft. ceiling. It has a cooling capacity of up to 5,000 B.t.u. per

Philco's latest air conditioner is powered by a 1/2-hp. motor in a hermetically sealed system. It measures 28 % in. wide, 13 % in. high, and 27% in. deep and will extend only 101/4 in. over the window sill.

Air intake and outlet is located on the front of the unit. An adjustable plastic grille permits air to flow in any of four directions. The cabinet is finished in two-tone tan and ivory.

## Court Restrains Price of Freon-12' See Pooling as **Answer to High Installing Costs**

#### Dealer Group Recommends Channeling Jobs Through Installation Specialist

CHICAGO—Pooling of installations was recommended by a committee of the National Electrical Retailers Association at a recent conference here as the best means now available for reducing the high cost of installing electrical appliances.

Installation problems were considered by the committee during the first day of the two-day conference at the Bismarck hotel. The committee then met the following day with 24 representatives of manufacturers. utilities, and electrical contractors for a round-table discussion.

In addition to recommending pooling of installations, the committee:

1. Endorsed the Adequate Wiring Program in new residential construction and recommended that the program consider 100 amp. service instead of 60 amp. in such construction "so as to provide adequate facilities for the use of additional appliances."

2. Recommended industry promotion of less restrictive city or other codes, in full accord with the provisions of the National Electrical Code, "so that all approved methods and materials may be used."

3. Recommended cooperative action with the National Electrical Contractors Association and the National Association of Master Plumbers—as well as all other interested groups-"in order to discover a solution to the various phases of the complex installation problem."

Opening the round-table session, Wendal D. Lewis, committee chairman, explained that the conference was called in an effort to develop ways wherein installation costs may be reduced wherever they are exhorbitantly high and to provide a higher quality of installation service wherever needed.

Lewis, who is manager of the appliance department of Klode Furniture Co. in Milwaukee, warned the group that "we must rectify these malpractices immediately if we are going to meet the coming competition from the gas industry.'

In recommending pooling of installations, the committee endorsed the NERA program "designed to channel more installation jobs through one or more electrical contractors or plumbers specializing in installations, thereby enabling the contractor to operate an installation department at (Concluded on Page 4, Column 4)

#### Apex Purchases Stock Of 'Dishamatic' Firm

CLEVELAND - Apex Electrical Mfg. Co. has purchased all capital stock of Lake State Products, Inc., Jackson, Mich., manufacturer of a dishwasher and a portable electric clothes washer.

Apex President C. G. Frantz said that the Lake State Products plant, where "Dish-A-Matic" electric dishwashers and "Cinderella" portable clothes washers are produced, will be operated as a wholly owned sub-

Frantz also stated that Apex will begin marketing its new automatic washer and its new clothes dryer in August. The automatic washer will employ a "bouncing basket" to clean clothes through a four-cycle process of washing, rinsing, damp-drying, and fluffing, Frantz explained. The clothes dryer will be engineered to dry an eight-pound wash in 30 minutes.

#### Group Works on Standards for Manufacturers' Agents Refrigerators, Home Freezers

NEW YORK CITY-The American Standards Association has recently announced that it has committees working on standards for household refrigerators and farm and home

With headquarters in New York City, the association is a federation of national groups for the purpose of developing mutually satisfactory national standards.

#### Parts Wholesaler To Occupy 8-Story N. Y. Building July 1

NEW YORK CITY-A new 8-story building offering 17,000 sq. ft. of floor space will be occupied by Paramount Electrical Supply Co., Inc. on or about July 1.

These improved facilities will enable Paramount to handle customer orders faster, states Harry Ralston, president. Display rooms have been provided.

## Association Campaigns To Boost Membership

LOS ANGELES - Manufacturers' agents are out to organize.

Spearheading the drive is P. Edwin Thomas who, as executive secretary of the Manufacturers' Agents National Association, supervised the recent mailing of a 20-page information booklet to some 25,000 agents throughout the country.

The MANA brochure describes in detail the role of the manufacturers' agent in distribution and outlines the objectives of this young organization. Thomas intimated that a monthly magazine would soon be inaugurated to serve as a MANA publication.

Charter membership can still be obtained by application to Thomas at 542 South Broadway, Los Angeles Permanent headquarters are to

#### Oak Ridge Servicing Bids REMA-RSES Plan 2nd Stay Open Until June 22 Educational Conference

OAK RIDGE, Tenn. - Bids for maintenance of refrigeration equipment in the city of Oak Ridge will be received until 11 a.m. (EST) on June 22 and then publicly opened, it was announced by Roane-Anderson Co., which is operating as an agent for the Government.

Equipment to be serviced consists in general of water coolers, walk-ins and reach-ins, domestic boxes, and air conditioning equipment.

The subcontract is to extend for one year from the date of execution, according to Roane-Anderson. However, at the option of the agent, the subcontractor will continue the work for an additional period of time.

#### DeBolt Directs Sales at Perry

CHICAGO-Appointment of G. H. DeBolt as vice president has been

BOSTON - Plans for the second Rema-RSES joint Education Conference and Exhibit which is to be held at Hotel Bradford, Boston, on Oct. 8, 9, and 10, are well under way.

A joint meeting of international RSES representatives, the local host club committee and Rema's Education Committee was held at Swampscott, Mass. June 3. Promotional plans were formulated and worked out to make it the finest educational meeting possible.

Many exhibitors were highly pleased by the recent San Francisco Educational Conference.

Heading the planning group are: John J. Madden, general chairman; Lee Wallace, asst. chairman; Chas. E. Harris, coordinator and publicity; Arthur W. Andreen, arrangements; James A. McCue, chairman, housing committee; Hermann F. Spoehrer, chairman of Rema Educational Committee, and K. B. Thorndike, vice

#### California Manufacturers **Association Reelects** Same Directors, Officers

LOS ANGELES-Members of the Refrigeration Manufacturers Associa. tion of Southern California at their last meeting unanimously reelected for another year the 1948-49 directors of the association.

The men who will serve during the 1948-49 year as directors of this association are:

B. R. Glazer, Super Cold Corp., Los Angeles; C. S. Meyers, Weber Showcase & Fixture Co., Los Angeles; B. H. Bakke, Coldew Corp., South Gate; H. T. Jarvis, Refrigeration Engineering, Inc., Los Angeles; Harry Ward, Ward Refrigerator & Mfg. Co., Los Angeles.

The directors reelected the previous year's officers, who are Mr. Glazer, president, Mr. Meyers, vice president and Mr. Baake, secretary-treasurer.

Neal S. Templin is executive secretary of the association whose head. quarters are at 1206 Maple Ave., Los Angeles and which is composed of the majority of the companies manufacturing refrigerating equipment and refrigerated fixtures in the Los Angeles area.

At the present time the association is engaged in renegotiating a master labor agreement between its members and the Los Angeles Building and Construction Trades Council and various local unions covering production workers in their plants.

#### Output of Coca-Cola **Vendors Hits Peak**

DETROIT-The F. L. Jacobs Co. produced more than 5,500 Coca-Cola bottle vending machines during May -a new high for that product, Rex C. Jacobs, president, has announced This record was attained even though price of the unit was raised \$22, he

Previous production high was recorded in April when 5.000 machines were manufactured and sold at approximately \$960,000. Sales of the machines are handled by Coca-Cola bottlers. The units are manufactured at the company's Indianapolis plant.

#### Corby Is Eastern Regional Mgr. for Cordley & Hayes

NEW YORK CITY-C. M. Cordley, president of Cordley & Hayes, has announced that Robert M. Corby,

who had formerly been service manager, is now eastern regional manager.

Prior to joining Cordley, Corby was a naval engineering officer on minesweepers. He is a graduate engineer from Lafavette college. Cord-



ley & Hayes manu- Robert M. Corby facture drinking water equipment.

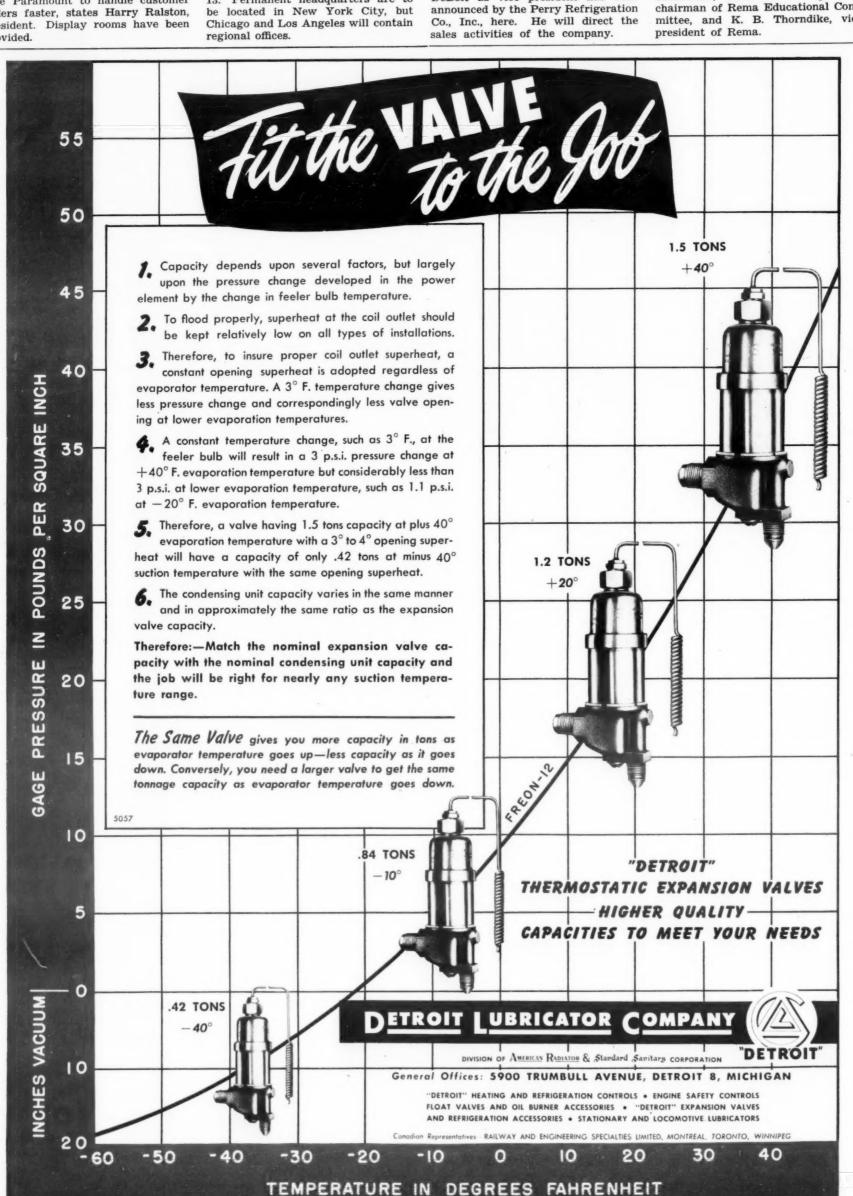
#### Airport Restaurant To Be Air Conditioned

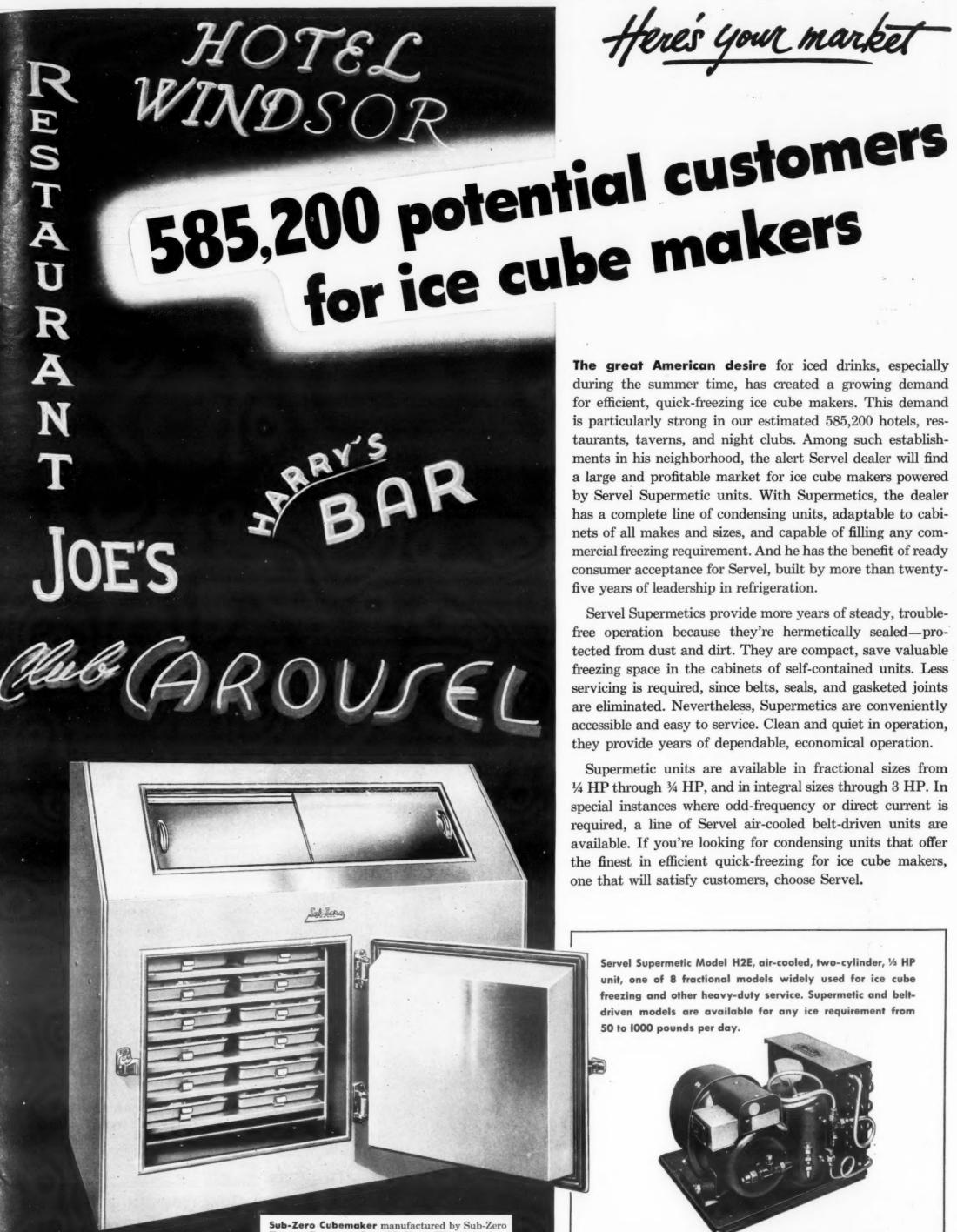
KANSAS CITY, Mo. - Expansion of the municipal airport restaurant here and the addition of air conditioning equipment will be completed in June, J. W. Gilbert and T. N. Milleman, co-operators of the favored eating place, said recently.

Natkin & Co., and the Universal Construction Co. are in charge of the expansion and installation of the temperature control facilities, which will involve the expenditure of about \$20,000 and increase the seating capacity of the restaurant to 225.

#### A. H. Reinach Resigns from United Commercial Sales Co.

LOS ANGELES-United Commercial Sales Co. here has announced the resignation of its vice president, A. H. Reinach. At the same time T. H. Chamberlin stated that no successor would be appointed as he has liquidated most of his outside interests, and plans to devote his entire time to the United company's affairs.





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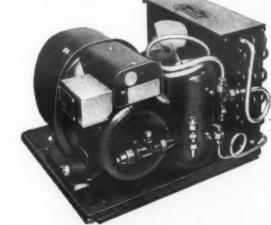
Here's your market

The great American desire for iced drinks, especially during the summer time, has created a growing demand for efficient, quick-freezing ice cube makers. This demand is particularly strong in our estimated 585,200 hotels, restaurants, taverns, and night clubs. Among such establishments in his neighborhood, the alert Servel dealer will find a large and profitable market for ice cube makers powered by Servel Supermetic units. With Supermetics, the dealer has a complete line of condensing units, adaptable to cabinets of all makes and sizes, and capable of filling any commercial freezing requirement. And he has the benefit of ready consumer acceptance for Servel, built by more than twentyfive years of leadership in refrigeration.

Servel Supermetics provide more years of steady, troublefree operation because they're hermetically sealed—protected from dust and dirt. They are compact, save valuable freezing space in the cabinets of self-contained units. Less servicing is required, since belts, seals, and gasketed joints are eliminated. Nevertheless, Supermetics are conveniently accessible and easy to service. Clean and quiet in operation, they provide years of dependable, economical operation.

Supermetic units are available in fractional sizes from 1/4 HP through 3/4 HP, and in integral sizes through 3 HP. In special instances where odd-frequency or direct current is required, a line of Servel air-cooled belt-driven units are available. If you're looking for condensing units that offer the finest in efficient quick-freezing for ice cube makers, one that will satisfy customers, choose Servel.

Servel Supermetic Model H2E, air-cooled, two-cylinder, 1/2 HP unit, one of 8 fractional models widely used for ice cube freezing and other heavy-duty service. Supermetic and beltdriven models are available for any ice requirement from 50 to 1000 pounds per day.



ELECTRIC REFRIGERATION DIVISION, EVANSVILLE 20, INDIANA

This is Number Eighteen in a series of advertisements featuring the markets available to the alert dealer in the commercial refrigeration industry. Ask for reprints for use in training your salesmen to take full advantage of all commercial refrigeration markets.

Freezer Company, Inc., Madison, Wisconsin, is a self-contained-type freezer powered by a Servel Supermetic. The Electric Refrigeration Division of

Servel, Inc., manufactures condensing units only, available through prominent distributors and fixture manufacturers in all sections of the country.

#### **DISTRIBUTORS WANTED!**

AMERICA'S GREATEST BEVERAGE COOLER

#### BUXTON CHILL-AIRE

THE ALL-ALUMINUM DRY BEVERAGE COOLER FOR IMMEDIATE DELIVERY

**Features** That Really Sell

- . ALL ALUMINUM Inside and out
- . GLASS INSULATION Cannot settle: vermin proof
- . IT'S DRY No messy water or ice
- . OVERSIZE COOLING UNIT For rush hours
- . ADJUSTABLE DIVIDERS For any size bottles
- . UTILITY SHELVES Pre-cool glasses, juices
- . EXTRA CAPACITY Holds 35 cases (12 oz.)
- CURVED DOORS They close automatically



TWO SIZES 8-Foot and 5-Foot

WRITE OR PHONE TODAY

For complete details—descriptive literature, price lists, territories available write or phone E. George Sanders, General Sales Mgr. at 3120 N. Main St., Dayton, Ohio. (Temporary nat'l sales office.) Phone Randolph 2147.

BUXTON, INC. 1900 E. 48TH ST. LOS ANGELES 11, CALIF.

1900 E. 48TH ST.

#### Group Buys Percival --

(Concluded from Page 1, Column 3) refrigerators; which are sold generally throughout the United States and in several foreign countries. The retail store in Des Moines, Iowa, wholesales compressors and parts, refrigeration coils, butcher tools, and supplies, besides selling the factory products

In 1942 at the death of the late president, Worth

H. Percival, Franklin G. Percival was elected president. Because of poor health, he turned the management of the business over to A. J. Maas, who has been with the firm 33 years, and who was then serving as vice president and production

A. J. Maas manager. The new owners have asked Maas to continue in charge.

Although Percival will retain the presidency, he will move back to Colorado, returning occasionally for directors meetings. Maas will carry on the business with no change in office or factory personnel.

#### York Declares Dividend On Common, Preferred

YORK, Pa.-Board of Directors of York Corp. on May 27 declared the regular quarterly dividend of 561/4 cents a share on the preferred stock, and 25 cents a share on the common.

#### 'Pooling' Seen ---

(Concluded from Page 1, Column 5) lower cost."

Examples of cases where this practice is being successfully employed, both in electrical and plumbing installations, were cited by the committee.

During the discussion on this point, it was agreed that a craftsman for appliance installations would solve the problem. It was suggested that one specialist could perform the duties several men do now.

Concensus was that such a specialist-thoroughly trained in the construction and operation of appliances-has long been needed. However, it was felt that until sufficient installation specialists can be developed, pooling of installations is the best solution.

Considerable stress was placed on the need for all affected groups to cooperate in eliminating "legalized monopolies" and bringing about lower costs and better installation service.

Representatives of manufacturers, utilities, and contractors alike applauded the recommendation on adequate wiring. But they pointed out the necessity of educating architects and builders to appreciate the advantages of adequate wiring.

It was further agreed that the public needs education and that this should be done through consumer newspapers and magazines. NERA pledged itself to work with dealers to gain their full support of the doctrine of electrical interdependence. In turn, the conference recognized that the dealer organization should be considered an important factor in adequate wiring promotion.

#### REQUEST LARGER CHARTS

While on this subject, dealers told representatives of manufacturers that range wiring charts are inadequate. They suggested the charts be larger and more legible.

The conference raised no objection, during the discussion of codes, to the provisions of the National Electrical Code, as used in many large cities. The committee said dealers will cooperate with contractors and other industry groups to have such lessrestrictive codes more widely adopted. The sale of all electrical appliances will be greatly retarded if more cities do not adopt provisions of this code, it was felt.

Considered at some length was the question of how much of the cost of installations is due to restrictive codes and how much to labor costs. It was pointed out that labor is not a factor in the majority of instances, since two cities having the same labor scale have a serious difference in cost.

On the ground that the national average cost of installing an electric range was \$49 in October, 1947, the committee went on record as opposing codes which raise costs to exhorbitant levels.

"Let us work for adoption of less restrictive codes," the committee urged. "Then if others still can sell the more expensive but still no safer installations to the consumer, the dealers of the nation will have no objection.'

According to figures cited during the conference, the average cost of installing an electric range in areas not under the "steel codes" ranged from \$30 to \$45. But where rigid conduits are required, costs were put at from \$85 to \$150.

The conference unanimously agreed with the committee on the merit of the program of cooperative action with the national contractor and plumber associations. Electrical interdependence, it was emphasized, is the answer to this and all other installation problems.

Concluding the session, Committee Chairman Lewis warned that the problem is at present acute in Milwaukee, Springfield. Mass., Atlanta, and other cities in Georgia, and in various cities in Illinois.

#### Parker H. Ericksen Directs Bendix Sales

SOUTH BEND, Ind .- Appointment of Parker H. Ericksen as director of sales for Bendix Home Appliances,

Inc. has been an. nounced recently by Judson 8 Sayre, president. Ericksen suc.

ceeds W. F. Lin. ville who resigned recently. The new director of sales served as adver. tising and sales promotion man. ager for Bendix from 1938 to 1943 but has since been

vice president in charge of sales for Majestic Radio & Television Corp. and president of Majestic Records,

His 15 years experience in the appliance sales field include an executive position with the appliance division of Fairbanks-Morse Co. and a period as advertising manager for Zenith Radio Corp.

#### **Eureka Cuts Prices, Boosts** Discounts as Output Rises

CHICAGO - Immediate price cuts up to 10% on several of its cleaning items were put into effect last week by Eureka Division of Eureka Williams Corp. Executive Vice President A. L. McCarthy, who made the announcement, also indicated that dealer discounts would be revised upward according to a schedule of quantity purchases.

Reason behind the new price and discount program, he said, is the production savings the firm has effected through an increase in its manufacturing facilities. Said Mc-Carthy:

"We are not attempting to cloak this price move under the guise of a 'cost of living reduction' or as an 'anti-inflation measure.' Postwar expansion of our manufacturing facilities has given us tremendous production capacity. We feel certain that the increased sales volume will result in lower production costs and will justify our passing those savings on to the consumer now."

As applied to the Eureka medium tank cleaner formerly retailing at \$67, the price reduction will mean a revised price of \$59.95, the company reported.

Packaging and price of attachments for Eureka cleaners have likewise been altered. Two automatic upright cleaners which previously had separate sets of attachments will henceforth utilize a single, standardized set which is to sell at a lower price of \$17.95.

Dealers will also have more leeway in adapting accessories to any one of the entire range of cleaner models.

#### **Cornell University Conducts Homemaker Freezer Class**

OSWEGO, N. Y .- Tioga County Home Bureau members will be able to obtain the latest information on preparation of foodstuffs for low temperature storage as the result of a training school to be held at the State College of Home Economics at Cornell University.

The school will teach preparation of fruit, vegetables and meats for freezing processing for storage in home freezers and in commercially operated frozen food lockers.

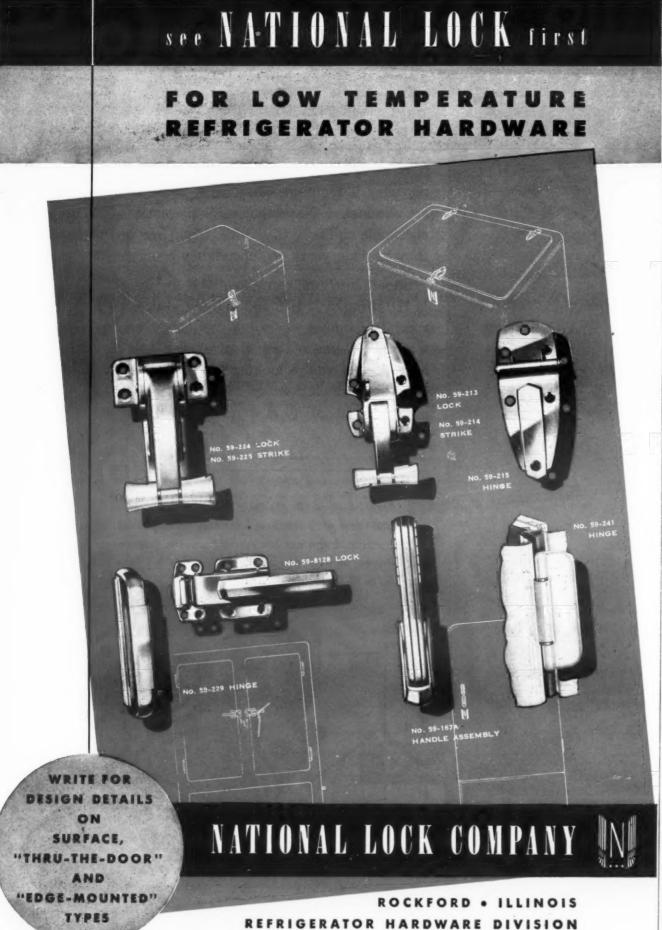
#### Supermarket Gets 200 Lockers

CHESTER, Calif. - Two hundred frozen food lockers are being installed in Young's Super Market here, according to an announcement by Vance L. Young, proprietor.

#### REFRIGERATION COMPRESSOR DESIGNER

Fine opportunity for a Senior Design Engineer. Prefer man having mechanical engineering degree and five years experience in small refrigerant compressor design and development. Hermetic compressor design experience would be excellent. Will pay a good salary to the right man.

In reply state fully your experience, education, desired salary and age. Address Personnel Division, Carrier Corporation, Syracuse 1, New York.



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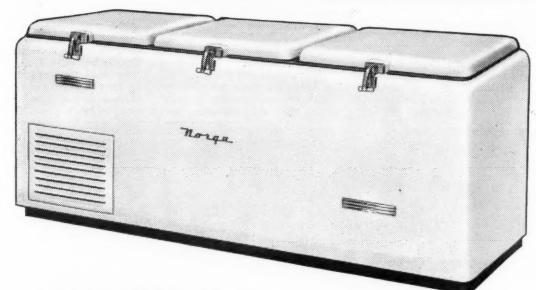
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Norge Home Freezers, like all Norge products, are backed-up by aggressive national advertising in the country's leading magazines, such as Saturday Evening Post, Ladies' Home Journal, McCall's, Good Housekeeping, Better Homes and Gardens, American Home, Christian Science Monitor, Country Gentleman, Farm Journal,

Successful Farming, and others.



#### NORGE MODEL HF-18

HOME FREEZER has a freezing compartment at the left, with separate lid and two storage compartments at the right. All three lids are counterbalanced, have lock-latch handles. Thick glass fiber insulation. Total storage capacity 18.62 cubic feet or approximately 650 pounds of food. Powered by 1/3 h.p. open-type "Rollator" cold-maker.

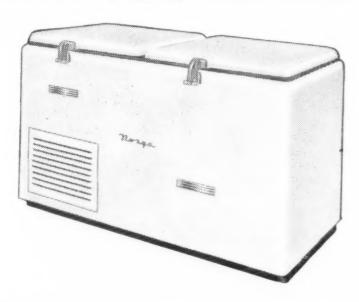


#### NORGE MODEL HF-6 HOME FREEZER

is a vertical-type freezer. Capacity of 6.35 cubic feet; holds approximately 210 pounds of food. There are six food compartment doors made of white plastic, each with label frame, for identifying the contents. Other features are refrigerated shelves; thick glass fiber insulation; positive-action door latch and a hermetically sealed 1/5 h.p. "Rollator" cold-maker condensing unit.

#### NORGE MODEL HF-26 HOME FREEZER

features full depth freezing compartment of 5.6 cubic feet with a total of 26 cubic feet of freezing and storage capacity or approximately 910 lbs. All of the lids are counter-balanced. The freezer condenser is a 1/2 h.p. open-type "Rollator" cold-maker.



# norge

#### NORGE MODEL HF-10 HOME FREEZER

has a total capacity (freezer capacity plus storage capacity) of 10.54 cubic feet, to accommodate approximately 370 pounds of food. This model is noteworthy for its two compartments, each with separate counterbalanced lid; lock-latch handles, five-inch glass fiber insulation, 1/5 h.p. hermetically sealed "Rollator" cold-maker condensing unit, and moderate price.

Norge Division, Borg-Warner Corporation, Detroit 26, Michigan In Canada: Addison Industries, Ltd., Toronto, Ontario

#### A BORG-WARNER INDUSTRY

REFRIGERATORS . ELECTRIC RANGES . WATER COOLERS . HOME FREEZERS WASHERS . ELECTRIC WATER HEATERS . HOME HEATERS . GAS RANGES



#### K. C. Jewelry Store, Hotel Maryland Contractors Will Be Air Conditioned

KANSAS CITY, Mo. - Complete air conditioning for two major business establishments here, is scheduled for summer and early fall installa-

The Muehlebach hotel has announced plans to proceed with a 12-story addition, a \$2 million construction and remodeling program which will include full air conditioning for both the new and present structure. The air conditioning will be for all seasons of the year.

Detailed plans for the Muehlebach hotel expansion are now in the blue print stage, with drawings available for construction bids in the early fall. These include temperature control in what will be Kansas City's largest and most impressive banquet and ballroom, a room calculated to seat 1,200. The new construction will also provide new refrigeration units, freezing facilities, wine cellars and ample basement storage space.

The hotel's public rooms are now air conditioned, including the coffee shops, bar and restaurant, but the year-round temperature controls will be extended to the entire building, according to present plans now in the hands of Neville, Sharp & Simon, architects.

The Helzberg Treasure shop, a 2story and basement space now under construction in Kansas City's Country Club Plaza district, will be entirely air conditioned before opening to the public about Oct. 1 with a complete line of glassware, chinaware, and jewelry. It will be the ninth store in the Helzberg chain of jewelry stores, the largest by far of present shops, and represents an investment of \$500,000.

Two full floors, a basement and a mezzanine will provide some 17,000 sq. ft. of retail and storage space in the building to be known as the Helzberg Treasure shop, a treasuretrove complete with air-cooled booty for the discriminating shopper.

#### Ready-PowerNames Wendt District Mgr. for 5 States

DETROIT - Appointment of William Wendt as district manager for the Ready-Power Co. in the states

of Texas, New Mexico, Oklahoma, Arkansas, and Louisiana was announced here recently by H. D. Gumpper, Ready-Power president.

Wendt, who previously has worked with public utilities and the electrical supply busi-

William Wendt ness in Texas and Louisiana, has temporary headquarters in Beaumont.

Ready-Power makes Ready-Power engined refrigeration units, engine generators, and electric truck units.





## Are 25th To Join NARC

BALTIMORE, Md.—The Maryland Association of Refrigeration Contractors, Inc., 25th local group to affiliate with the National Association of Refrigeration Contractors, received its certificate of membership at a meeting in Deutsches House here May 10.

The certificate was presented to Jack B. Ottenheimer, president of the Maryland association, by Ralph Lampie, national officer and director and eastern division chairman of the membership committee. More than 35 contractors witnessed the presentation and listened to talks by national and local officers.

In addition to Lampie, speakers included E. S. Wright, NARC president; George Roche, immediate past president of the Refrigeration Equipment Wholesalers Association; and J. J. Helminak, NARC executive vice president. Wright, who was unable to attend, was heard by means of a wire recorder.

Talks stressed the need for a strong membership and united effort to solve contractor problems. Past, present, and future activities of NARC were outlined. An informal question and answer period followed the talk.

Besides Ottenheimer, Perfect Refrigeration Co., other local officers are: Kenneth Milford, Superior Refrigeration Sales Co., vice president; Harry W. Goodhart, The Premier Refrigeration Co., secretary; Aaron M. Aaron, Arco Refrigeration Service, treasurer; and Jack Frazier, Electric Refrigeration Co., sergeant-at-arms.

#### Omaha Furrier Guild Sees **Need for Refrigeration** In Storage Facilities

OMAHA, Neb .- Insistence on mechanically refrigerated cold storage for furs is urged upon Omahans by the Omaha Master Furriers Guild, whose 11 members are conducting a current storage campaign stressing the fact that in addition to skill and special knowledge they have the refrigeration facilities to properly safeguard furs while in

"Just any old storage is not good enough for your fur coat," read typical advertising copy. "A warm room with 'scientific' sprinkling of moth balls is not the Guild idea of fur storage. . . . For safe cold storage call any of these Guild members for bonded messenger pickup. . . ."

Guild members include Aulabaugh Furs, Inc., Mor Ann Furriers, Norval A. Petersen, Sample Fur Shop, Parmelee Furs, Henry E. Thomsen, George Blubaugh, Kish Royal Furs, Anna Sautter, Strassheim Furs, and Travers Furs. An emblem, showing a hand holding a torch, with the words, "Truth in Furs . . . Member . Omaha Master Furriers Guild," is being used in show windows and newspaper advertisements, along with the copy:

"Don't be misled . . . by cut price or cheap storage rates. Despite inflationary prices, Guild storage rates have not increased in 30 years-3% of the valuation of your furs. A lower rate means lowered standard Chattanooga Goo-goo!

#### Refrigerated Storage and Delivery Is Feature Of Prepared Infant Formula Service In South

CHATTANOOGA, Tenn. - A new company which supplies baby's formulas direct to the home, just as prescribed by the pediatrician, has been started in Chattanooga.

The new company called the "Infant Formula Service," uses a large sectional walk-in cooler and a refrigerated truck in its operations.

Because of the fact that many babies are placed on a formula by physicians soon after they leave the hospital, both mothers and fathers necessarily must spend time mixing the formula, washing and sterilizing bottles. This unique service has done away with this chore. Now the bottles, bottle caps, nipples, and the specially prepared formula is delivered to the door in a special refrigerated truck. The business is owned and operated by Dr. and Mrs. W. O. Stephenson and Mr. and Mrs. W. L. Nelson, of Chattanooga, Tenn.

The laboratory where the formulas are mixed contains a large walk-in freezer called the "Stor-Vault," manufactured by Wilson Refrigeration, Inc. The Stor-Vault has an interior capacity of 330 cu. ft. and is used for the preservation and storage of the baby formulas until time for delivery, when they are transferred to the special refrigerated truck.

The cost of the service will vary with the ingredients of the formula and the amount.

Mrs. Stephenson, explained in detail how the service will operate. "When we are engaged by a mother, we prepare a master card showing all the information about the child and the exact formula as prescribed by the pediatrician," Mrs. Stephenson asserted.

"The formula is carefully prepared and sealed in sterile bottles. A smaller card-a duplicate of the master card -is used by the laboratory techni. cian in preparing the formula, and that card is fixed to the bottle container. That assures against any possibility of a mix-up because that card stays with the bottles all the way home to mother.

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"The next day we prepare another card from the master card for the next formula. We offer to do all this under conditions more sanitary than any obtainable in the home and with the services of an expert laboratory technician."

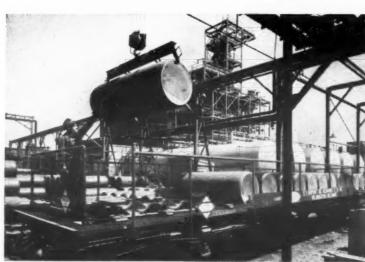
#### O'Neill Heads Sales for Div. Of Refrigeration Exchange

ATLANTA-E. T. O'Neill has been appointed sales manager of the soda fountain division of Refrigeration Exchange, Inc., of this city.

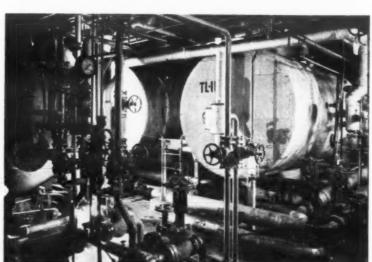
O'Neill assumes his new position after gaining experience in related fields. He was associated with Liquid Carbonic Corp. for nine years. In the Army for four years, he was stationed for three years in the European theater of operations and was commissioned a second lieutenant in the infantry while in France.

# Kinetic ANNOUNCES

## **Production Capacity Increased SIXTY Per Cent!**



Ton drums containing first "Freon" from new plant are loaded on flat car.



Tanks, pipes, valves, pumps, gauges—a view of plant interior shows type of equipment used to produce "Freon."

A new, completely modern plant to manufacture "Freon" safe refrigerants and propellents recently began operations at East Chicago, Indiana. Estimates indicate it will increase production capacity of "Freon" sixty per cent.

Construction of the new plant began last August and a staff of experienced production supervisors aided in speeding the installation of equipment. Production line shipments of "Freon" in ton drums have already started.

Now that ample "Freon" will be available to meet the steadily growing demand for these refrigerants and propellents, it will no longer be necessary to build up individual stock piles. However, the shortage of cylinders in which to ship "Freon" continues, and empty cylinders are still urgently needed to meet current demands.

Kinetic Chemicals, Inc., Tenth and Market Streets, Wilmington 98, Delaware.

## Hotpoint Dealer-Distributor Product Training Plan Outlined to Field Men

CHICAGO—A "product knowledge" training program which will be carried this summer to 700 distributor salesmen and more than 25,000 retail salesmen was launched recently by Hotpoint, Inc., at a series of meetings attended by 40 company headquarters and field executives.

The three-day sessions, held at Liggetts Inn, Burlington, Wis., included product presentations and demonstrations by all division managers following statements of policy and procedures by top officials, including James J. Nance, president, and Leonard C. Truesdell, vice president of marketing.

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This program is the first held by the company for its entire field organization since the completion of Hotpoint's \$20 million expansion. Itinerary for the week included tours of the company's nearly complete, \$10 million Chicago range plant, and new dishwasher and water heater facilities at Milwaukee.

Truesdell's four-point marketing program, built upon "analysis, organization, merchandising, and supervision," was expanded in presentations by Howard J. Scaife, manager of market development; Hollis C. Doss, sales planning manager; Ralph C. Cameron, manager of the dishwasher-Disposall department; Edward R. Taylor, manager of merchandising, and J. L. Hughes, advertising head.

In the wholesaleman's terms, thorough analysis should include a complete case history of all dealers in a specific territory, covering sales volume, type of outlet, location, advertising and promotion expenditures, attention to proper training, and use of direct mail, Scaffe said.

Taylor urged wholesalemen to plot a quarterly sales activity calendar detailing for each dealer sales promotion activities for every product in order to reach the full potential.

Doss outlined a program which will include a national sales training organization contest for distributors under which prizes will be awarded on a basis of accomplishment in organizing dealer salesmen meetings. He characterized it as "the most comprehensive and condensed training program in Hotpoint's history." The training program will be conducted between June 14 and Aug. 2.

A 14-point training responsibility program was described for district managers by Charles H. Smith, manager, sales training. Smith said training assignments for distributors would be divided among district managers, product specialists, and district sales managers, with responsibility for high performance of training resting with the district managers. The program includes:

1) Showing training plan to distributors; 2) gaining distributor's approval of quota; 3) arrange dealer meeting in territory; 4) supervise setting up wholesalemen meeting quotas; 5) training wholesalemen in conduct of meetings; 6) Hotpoint manager participation in larger meetings; 7) make weekly report on progress of training program in dis-

trict; 8) assemble record of retail salesmen's names; 9) check for 100% dealer attendance at meetings in stores or at distributors' offices; 10) handle distribution on retail salesmen's kits; 11) supervise distributors' salesmen's reports on meetings; 12) investigate and correct where progress lags; 13) aid in sales of product where possible; and 14) set highspeed weekly completions of meetings.

Stanley E. Wolkenheim, manager of sink and cabinet sales, presented the program for water heater sales training. He showed a "flip-chart" with the product story on one side and illustrations on the other.

The market outlook for home laundry appliances with a program for training meetings was outlined by Lloyd I. Sweetland, manager, home laundry sales. Training presentations for distributors' organizations on refrigerators-freezers was given by John McDaniel, manager, refrigeration sales; dishwasher-Disposall training by Ralph C. Cameron, manager, dishwasher-Disposall sales; and range sales training by Smith.

The June distributor meeting schedule will be carried on by four crews from Hotpoint headquarters.

Group No. 1 under Doss will hold four meetings at Chicago between June 2 and 23. Crew 2 under McDaniel will hold five meetings at Pittsburgh, Philadelphia, New York City (2), and Boston between June 2 and 22.

Scaife will head a crew holding five distributors' meetings between June 7 and 22 at Richmond, Charlotte, Atlanta, and Dallas (2). The fourth crew under Taylor will conduct four meetings at Kansas City, Seattle, San Francisco, and Los Angeles between June 2 and 16.

## Retail Selling Exceeds Pre-Christmas Volume

WASHINGTON, D. C.—Retail sales for April, allowing for seasonal differences, exceeded even the record volume scored during the pre-Christmas rush last year, the U. S. Department of Commerce stated recently in reporting a noticeable pickup in consumer buying.

This activity, the department indicated, was very welcome to retail merchants who had piled up a \$1,000,000,000 inventory in March—twice their normal inventory at this season.

The Commerce department found a number of other things on the upgrade, too. These included:

Merchants' optimism over future business prospects.

The cost of living—has reached a new high with more price increases expected after midyear.

New orders for manufactured goods.

Number of new houses started—90,000 in April. The total for the first four months of the year is 25% above last year.

Industrial production—though still slowed by steel shortages.

#### Pieper Shifts to New G-E Post

ERIE, Pa.—John F. Pieper, formerly of the personnel division, Erie Works, General Electric, has been appointed district representative on refrigerators and freezers for the Atlantic district. Pieper transferred to the refrigerator division some months ago.

#### San Diego Dealers Boost Home Freezer Sales 130% Over April, '47 Level

SAN DIEGO, Calif.—A report by the Bureau of Radio & Electrical Appliances of San Diego County shows that retail sales of nearly all major appliances in the area during April exceeded those of April a year ago, with home and farm freezers registering 130%.

Sales of vacuum cleaners were up 73%, gas ranges 62%, refrigerators 47%, automatic washers 44%, non-automatic washers 23%, and electric ranges 13%. But electric water heater sales dipped slightly.

Garbage disposal units showed the greatest percentage sales gain of all appliances. A total of 175 units were sold this April.

Commenting on the report, J. Clark Chamberlain, secretary-manager of the bureau, said appliance sales in the county, collectively speaking, "have been making new records over similar months last year, and in most instances far outshine the sales of the 'good old days'—1941, that is."

Although radio sales were down, Chamberlain pointed out that April figures show increases over each of the two previous months.

An extract of the report follows:

Appliance Apr	
Refrigerators 1,47	5 1,000
Home & Farm Freezers 30	
Electric Ranges 30	
Gas Ranges 1.15	0 710
Electric Water Heaters. 20	0 210
Automatic Washers 60	0 415
Non-Automatic Washers 95	0 775
Portable Washers 16	5 150
Automatic Ironers,	
Consoles 7	5 *
Automatic Ironers,	
Portable 22	5 260
Dishwashers 7	5 70
Clothes Dryers 1	5 *
Garbage Disposal	
Units 17	
Vacuum Cleaners 1,25	0 720
Radios, F.M 40	
Radios, Other Types 2,30 *No record.	0 3,400

## Water, water everywhere...

and wonderful to drink when cooled by

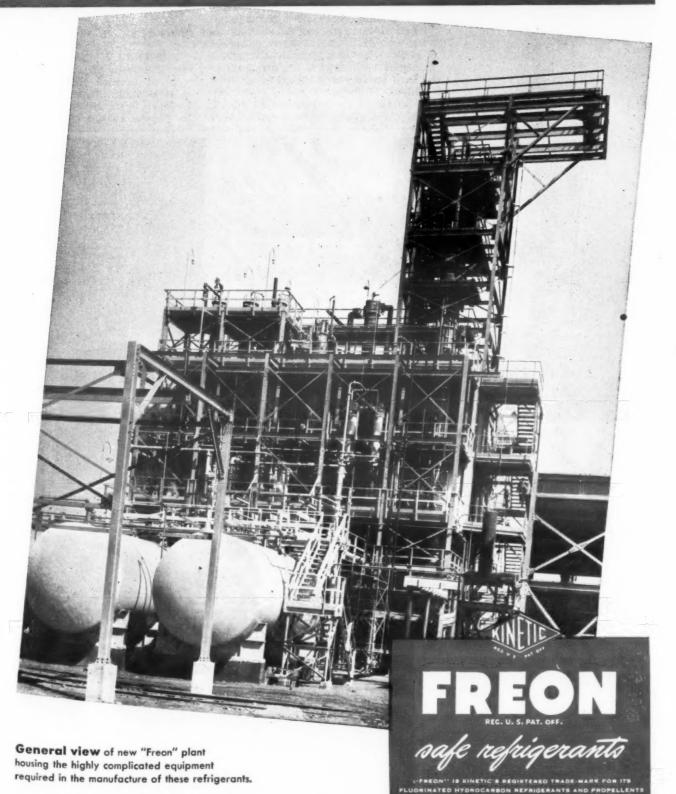


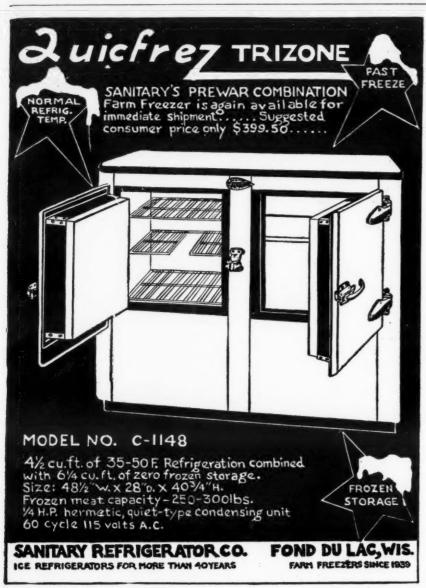




Revelation Company
Division of
INTERSTATE ENGINEERING CORPORATION
2250 East Imporial Highway
El Sognado, California

New "FREON" Plant





#### March Shipments of Apt., Standard Ranges Increase

WASHINGTON, D. C.-Shipments of standard type electric ranges during March were up 21% over February while shipments of apartment type ranges increased 33%, the National Electrical Manufacturers Association has reported.

The association revealed that 108,-334 standard types, valued at \$14,-261,512, and 20,557 apartment types, valued at \$1,436,155 were shipped during March. A total of 89,886 standard types, valued at \$11,547,506, and 15,716 apartment types, valued at \$1,095,895, were shipped in Febru-

For the year 1947, 892,047 standard types, valued at \$108,272,967, and 151,664 apartment types, valued at \$9,575,320, were sold, Nema said.

#### Distributor for Crosley Expands Ohio Territory

COLUMBUS, Ohio-Expansion of the territory of the Miami Valley Distributing Co. to include 24 additional counties in the Columbus, Ohio, area has been announced by Corley W. Kirby, domestic sales manager, Crosley Division, Avco Mfg. Corp.

Guy Haley, a veteran in the radio and appliance fields, will be Columbus branch manager, George E. Schumacher, president of Miami Distributing, announced.

Edward F. Smith, vice president and general manager of Miami Valley Distributing, will supervise the Columbus and Dayton offices.

#### Home Buyers Get the Works from Whissel



Frank X. Whissel, manager of the L. N. Whissel Lumber Co., Inc., proudly displays his appliance sales floor, part of his complete operation designed to provide a single source for equipment needed in new homes.

#### Suburban Lumber Dealer Becomes Source Of Everything from Paint to Appliances

By George M. Hanning

WILLIAMSVILLE, N. Y .- Believing that home buyers will tend more and more to purchase all the equipment possible for their new house from a single source, Frank X. Whissel, manager of the L. N. Whissel Lumber Co., Inc. here, has set up an appliance showroom in his lumber

He carries the complete line of Kelvinator kitchen appliances from storage cabinets to home freezers. In addition, he displays the Coolerator home freezer.

Carrying his single source of supply idea further, he handles not only major appliances, but also a line of unpainted furniture, paints, plumbing and heating fixtures, and even a few traffic appliances.

He believes his type of operation to be very practical in fast-growing suburbs of metropolitan areas.

Right now, Whissel can sell about all the appliances he can get directly to building contractors for installation in the many new homes that are going up in this suburban Buffalo area. Sales of appliances to builders comes naturally, he claims, because they already buy their lumber from him.

Constant reminders that he carries appliances is given to builders every time they receive a Whissel invoice, he said.

As yet, Whissel has done little selling direct to the consumer. One Foo

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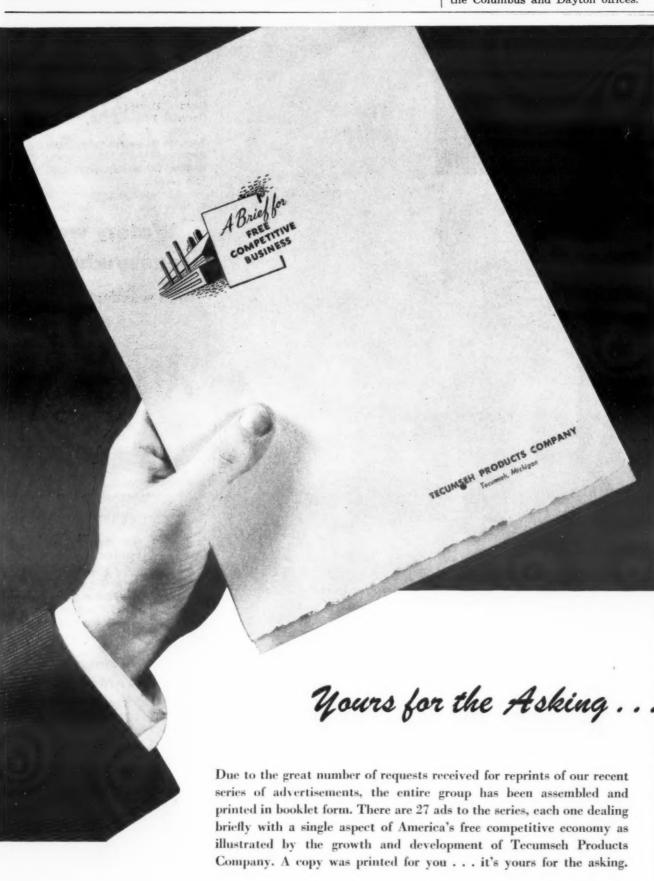
reason is insufficient supply of merchandise. He does no consumer advertising

and depends entirely on his store display to inform the public that he carries Kelvinator appliances. He reasons that people who come in to purchase building supplies will look over the display and, when they are ready to buy appliances, will think of Whissel's as the place to get them.

However, it is not Whissel's intention to sit back and let the public beat a path to his door. When the time comes for actively merchandising major appliances, he intends to hire a man to take full charge of that department. He expects to do considerable advertising then and promote the appliances through cooking schools and other such methods.

#### Harvath Gets G-E Post

NASHVILLE, Tenn.-L. W. Harvath has been appointed local manager of General Electric appliance sales in Nashville, announces A. M. Sweeney, general sales manager of the Appliance & Merchandise Dept.



to Blend with YOUR **Product's Design** • Moulding is an integral part mouldings for your products right with mouldings by JOHN LEES. Stainless steel moulding may be the answer to a problem which might have required more expensive, and less attractive, castings or stampings. Consult our engineers, experienced in meeting moulding requirements for decorative trim, frame assemblies, functional channels, and other applications. Let mouldings by JOHN LEES help make sales for you. Send for free analysis, recommendations and costs on your rolling, forming and polishing requirements. Hundreds of standard sections. Special sections made to specifications. **Electrolytic Polishing**!

 JOHN LEES is equipped to polish either mechanically or by the new electrolytic method. The latter is superior for punched, stamped, and formed surfaces; produces a gleaming finish over the entire surface. In many cases it is less costly

The SERRICK Corp., Muncie, Indiana, U.S.A.



TECUMSEH PRODUCTS COMPANY

Tecumseh, Michigan

World's largest independent producer of Compressors and Condensing Units

#### Thirsty Store Visitors Become Customers



Proof that a water cooler can be utilized for something more than thirst-quenching is shown in this set of photos taken at the Crown Appliance Store, Chicago. The Ebcowater cooler (refrigerated by a Kelvinator unit) is so positioned that store visitors mest pass between long lines of appliances to reach it. The manager claims the water cooler stimulates sales.

## New Budget Shows Economy of Home-Frozen Foods over Those Bought Fresh on Market

SMYRNA, Del.—A rotating frozen food budget for a 25-cu. ft. freezer, showing comparative costs of home-frozen versus market-bought fresh foods, is the feature of a retail presentation entitled "The Modern Family Freezer."

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Just issued by Wilson Refrigeration, Inc. here, the budget was prepared by Dr. Donald K. Tressler, noted consultant on food freezing and formerly chief chemist for Birds-Eye Laboratory, General Foods Corp.

Because of the specific information contained in it, the brochure is useful to distributors, dealers, and consumers alike, according to Wilson. Said Charles R. Mougey, advertising and sales promotion manager:

"This brochure does not deal in generalities, but shows how actual dollars and cents can be saved through the use of the home freezer and the rotating frozen food budget technique."

The budget lists the costs of foods bought on the market, quantity necessary, cost of packaging materials, cost of freezer operation, and retail value of the frozen food when consumed. The gross increase in value also has been shown for products placed in the freezer.

Data submitted in the budget indicates that the Wilson Family Freezer can pay for itself in 32 months. It also is intended to show

Send

FOR THIS

BULLETIN

that a net profit on use of the freezer of \$254.85 for one year is possible.

The budget covers more than 36 different types of meats, fish, fowl, and vegetables. It has been planned on the assumption that foodstuffs are bought in season, when quantity is high and prices are lower.

The illustrated brochure develops the theme that freezing at home is "truly the modern method of food preservation," and emphasizes the advantages of the reach-in type of home freezer.

#### \$300,000 St. Louis Dealership Accents All-Electric Kitchens

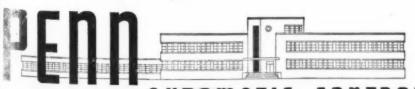
ST. LOUIS—Three complete, allelectric kitchens are an outstanding feature of the new \$300,000 retail hardware store which Thrift Hardware & Supply Co. opened here recently.

The appliance department, which is heavily emphasized by David Turken, president of the firm, is franchised with five nationally advertised appliance lines, three of which are represented in compact model kitchens along the right wall of the store. A staff of five outside salesmen "cold canvassing" the surrounding residential districts will sell the appliance lines, compensated with a straight 7% commission.



Get the facts now, about this entirely new line of motor starters. Compact, easy-to-install, sturdily constructed for long life and dependability.

Built in sizes 0, 1 and 1½. Available with Type 1 enclosures or as open-type models for control panels. Overload relays easily adjustable for automatic or manual reset. Write now for Bulletin 2705 to Penn Electric Switch Co., Goshen, Indiana. Export Division: 13 East 40th Street, New York 16. In Canada: Penn Controls Ltd., Toronto, Ontario.



OR HEATING, REFRIGERATION, AIR CONDITIONING, ENGINES, PUMPS AND AIR COMPRESSORS

AUTOMATIC CONTROLS

#### Bill Denying Wholesale Salesmen Social Security Benefits Gets Opposition

WASHINGTON, D. C.—Representatives of the nation's estimated 1,500,000 wholesale salesmen launched a campaign recently to keep Congress from taking away their rights under the Social Security Act.

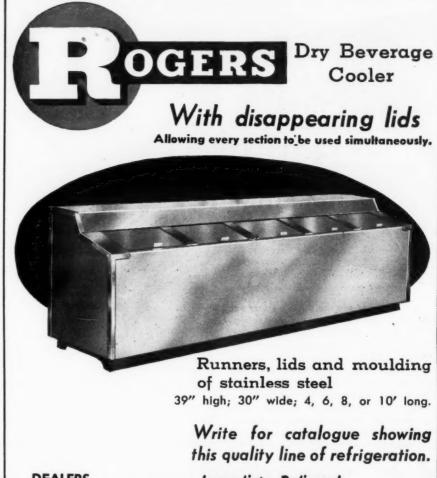
These rights are said to be endangered by the Gearhart bill, already passed by the House and up for action in the Senate. The Gearhart bill would exclude certain semi-independent workers or contractors from Social Security Act benefits.

It is allegedly intended to counteract a Supreme Court decision last year that brought additional groups of employes within limits of the act.

The National Council of Salesmen's Organizations and representatives of 56 other national, state, and local salesmen's groups have joined to fight the bill, according to Louis Capaldo, president of the council.

Rep. Herman P. Eberharter of Pennsylvania, who had led the opposition to the bill in the House, stated, "If the Gearhart bill becomes law, wholesale salesmen, who are just as much an integral part of the manufacturer's business as the men in the foundry, will no longer be insured against the risks of unemployment or old age."

The council favors an amendment to the Social Security Act that would expressly include wholesale salesmen and "thereby remove any question of their rights and benefits."



DEALERS WANTED

Write, wire or phone today for information on franchise.

W.ALLEN ROGERS Industries
BOX 272-AC DEMOPOLIS, ALA.



the important thing to know about refrigeration tube is

IT'S REVERE!

DEAD soft tube that's easy to bend . . . that won't split at the ends when flared . . . that's what you always get when you order Revere Dryseal Copper Refrigeration Tube. And now Revere Dryseal Tube provides three new advantages:

New, more economical dimensional standards.

New double-groove mechanical seal. It is compact enough to pass through any opening large enough for the tube itself. It permanently keeps the interior of the tube clean and dry.

New red and blue package that protects the tube, takes up less storage space and is easier to unpack. Revere Dryseal Tube comes in sizes from \( \frac{1}{6}'' \) to \( \frac{3}{4}'' \)
O.D. and is packed two 50-foot coils to a package.

Ask your distributor for all the new facts on the new Dryseal—the easy-to-bend copper refrigeration tube that assures you of fine quality in every length you buy.



COPPER AND BRASS INCORPORATED
Founded by Paul Revere in 1801

230 Park Avenue, New York 17, New York Mills: Baltimore, Md.; Chicago, Ill.; Detroit, Mich.; New Bedford, Mass.; Rome, N. Y. — Sales Offices in Principal Cities, Distributors Everywhere.



DESIGN CONSULTATION SERVICE . . .

a million dollar plant addition. We can give you shelving to any specifications in

quantities to meet your production schedules. Call or write today for details.

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Take advantage of Union Steel's Design Consultation Service which frequently leads to a better shelf for less money.

#### UNION STEEL PRODUCTS CO.

531 Berrien St., Albion, Michigan • Telephone: Albion 147

What a Girl Is Pearl

## Do Women Make Good Appliance Dealers? Here's One Who Did—Strictly on Her Own

By John O. Sweet and George M. Hanning

DETROIT—L. Pearl Williams is a woman who has made good on her own in a field dominated almost entirely by men. But—

"What is so unusual about a woman running an appliance business?" she wants to know. "Who should know more about household appliances than women?"

However, the trim, attractive brunette who heads a thriving dealership here admits that she has been able to find only one other woman who could sell appliances. And she knows of no other woman appliance dealer.

(For some time she has had a standing order with an employment agency for saleswomen but to date has found no suitable applicants.)

So what is she doing in this business? Here is her story.

Out of college with a major in sociology—and a minor in psychology—she tried jobs in social work (where the people on relief "were getting more money than I was") and in a fur store.

Feeling that she had a "natural flair for selling," she drifted into an appliance store and got a job. The manager could keep her behind a typewriter in the office for only three days. Then out on the sales floor she went to try her wings.

"Same insulation

they use in the

best commercial

refrigerator

cases!"

"What Is So Unusual...?"



L. Pearl Williams, "bo's
ma'am" of Detroit's Radio City Sales, who has
enlarged her store three
times in five years,
thinks that the appliance field is a "natura!"
for women with a flair
for selling.

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She admits she knew nothing about the ranges, refrigerators, and radios that she had to sell. But she learned—quickly.

She learned so well, in fact, that in 1943, she decided to start off on her own. She opened a small store just out of Detroit's downtown section and called it Radio City Sales.

Merchandise was hard to get in those days and new franchises just weren't to be had. So Miss Williams scoured the country, buying up appliances wherever she could find them.

Once in Oklahoma, she bought up hundreds of washers. The tall, husky Oklahoman who was loading the washers for her (she related), looked her up and down. "Ma'am," he finally blurted out, "don't 'pear to me like you'd know anything about washing machines!"

Apparently she did know something about "washing machines." For, in time, she acquired a variety of appliance franchises and gradually expanded her store so that today it measures four times the size of the original shop. Radio City Sales now has a 100-ft. frontage on Detroit's heavily-traveled main stem and a 50-ft. depth.

#### Five Helpers—All Men

Four salesmen and a store manager—all men—assist Miss Williams in attaining what she describes as a "healthy volume." Other employes include two radio servicemen and a girl to handle the office work.

Though many latecomers to the field are finding the going increasingly tough, Miss Williams has big plans for the future. She dreams of an appliance store that will fit the spirit of the automobile capital—one that will have glass on all four sides so people can window-shop right from their cars. This will be accomplished by having driveways on both sides with parking in the rear.

If everything goes right, that dream should become reality in 1950. Construction is expected to begin next spring.

The dreams of this ambitious

woman go beyond this, however. She is also dabbling in a new venture in New York—strictly "hush-hush" at the moment.

Miss Williams has her own ideas on how to sell appliances. She likes to talk about them, so let's listen:

"We use psychology to sell appliances here at Radio City. We have to. Our location makes us different from the ordinary run of appliance store. We are not a downtown store and we are not a neighborhood store. We are a central store.

#### Come From All Over

"Our patrons come from all over the metropolitan area. We draw a large Negro trade from the immediate neighborhood—they are always welcome here. And we draw many professional and businessmen from downtown offices. We do not get a uniform type of customer.

"So our policy is to bend with the customer. Get right down where he lives.

"If he wants to jitterbug, we jitterbug. If he wants to praise the Lord and shout 'Hallelujah,' we praise the Lord and shout 'Hallelujah." If he acts tough, we show him we can be just as tough.

"We treat the professional man in the same way as he is used to being treated in his work.

"We put ourselves on common ground with our customers and try to make them feel right at home. Selling that way is fun."

The young Miss Williams is a good example of how to "bend with the customer." She smiles almost continually; she gestures graphically to emphasize points; she talks quietly

(Concluded on next page)





Mony prospective Freezer owners are "window shopping" now — planning to freeze and store those tender "springers" for tasty broiling next winter . . . or anticipating storage facilities for fresh garden produce, a "porker" or two, a prize steer. Or they're anticipating licking the high cost of food by quantity purchases when these foods are plentiful and at lowest prices this summer.

BEN-HUR National Advertising is priming these prospective freezer owners to look for BEN-HUR Farm & Home Freezers in your community! Cash in on this active demand by displaying the complete BEN-HUR Line in your store—FOUR popular models, in 6, 9, 12.5 and 18 cubic foot sizes to fit every family's need. Every model challenges comparison — in styling, beauty, engineering and long-life performance at low operating cost. And selling is made easier with Ben-Hur's complete sales helps — displays, direct mail, and ad mats, and other extra-

#### Compare Them All . . .

and you'll choose the BEN-HUR Line
A few choice territories still open.

BEN-HUR MFG. CO., Dept. AC 634 E. Keefe Ave. MILWAUKEE 12, WISCONSIN

FARM and HOME FREEZERS

HEALTHFUL LIVING THROUGH FROZEN FOODS

Fiberglas is the trademark (Reg. U. S. Pat. Off.) for a variety of products made of or with glass fibers by Owens-Corning Fiberglas Corporation

#### Her Policy: 'Get Down Where Customer Lives, Treat Him As Well After Purchase As Before

(Concluded from preceding page) but enthusiastically; she nods and find yourself nodding in agree-

As she expresses it: "I can't talk without selling."

However, as a matter of policy and ps chology, employes at Radio City Sales never use the word "sell" to the customer. They "service the customer's needs."

We believe the word 'sell' builds up a certain resistance within the customer's mind," she explained. "He doesn't want to be sold anything.

When a customer walks into our store, we feel he has a pretty good idea of what he wants. If he doesn't, then the manufacturers have been wasting millions of dollars in advertising.

"When I go shopping, I know from reading the advertisements just what I want. We think that our customers do, too. So when we first approach them, we try to find out what they have in mind.

#### Get Patron's Background

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ng

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"If they really haven't decided on anything, we inquire into their background-the number of people in the family, the age groups, etc.-to find out what they would need. Then we ask if we can show them something that we think will fill their requirements.

"It is more criminal to sell a customer a refrigerator that is too small for his needs than to sell him shoes that are too small. He can throw the shoes away after a few months if they pinch. But he can't afford to throw away a refrigerator.

"Most customers will buy only two refrigerators in their lifetime. So it is very important that they get one that will fit their needs for years to come as well as for today.'

Another point in Radio City's sales policy emphasized by Miss Williams is to treat the customer who has purchased as carefully as the customer who hasn't.

"Since much of our volume comes from repeat sales, we make it a point to give the customer as much consideration after we get his money as before," she asserted. "With us, the customer is nearly always right.

"If he comes in feeling he has been kicked around-maybe not by us but

by somebody-we don't argue with him. We sit down and talk over his trouble calmly and can usually settle it quickly and easily. When he goes away, we are friends again.

"If we didn't do this, we would lose not only his business, but that of his friends and neighbors. A satisfied customer is always willing to recommend your store to his friends."

The radio service department, she added, is a great help in keeping customers happy. The department works on a non-profit basis, she said. The customer is charged only for the cost of the materials used and the serviceman's time. Result: low bills

One thing that Radio City Sales doesn't do, she declared, is to hold cut-price sales.

"When I see an advertisement offering something for sale, I immediately ask myself 'What's wrong with it?' I think that the customer reacts the same way," Miss Williams explained.

"Our prices are plainly marked on each appliance and we do not cut them. Of course, if a piece of merchandise has been slightly damaged or has been slightly soiled or faded

from standing on the floor, we do sell these at reduced prices.

"But we tell the customer exactly what is wrong with it and show him that though the exterior is marred, he is getting the same mechanism that he would in a brand new unit."

Miss Williams applies her psychological approach to employes as well as to customers.

For example, she never hires a salesman the same day she interviews him.

"We don't want to talk him into coming here," it was explained. "He must want to work here more than we want him to. After all, he is going to spend more time on his job than he will with his wife.

"Naturally he must have a flair for selling. We pay off on productivity here. If the salesman doesn't produce, we try to find out why and work with him to overcome the diffi-

"We hold sales meetings regularly in the store and we attend most of the meetings conducted by distributors and factory representatives. We also take in as many industry sales institutes as possible.

"But we try not to overburden the men with evening meetings. They can't be at meetings every night and then be at their best the next day.

"Our salesmen work both outside and inside; the number working inside depends on how busy we expect to be that day. The outside men follow up on customers we haven't heard from in some time. They check up to see if any appliances are needed and remind the customer we still wish to serve him."

Miss Williams pays her salesmen a straight salary plus an annual bonus. In addition, they are paid weekly bonuses if they reach specified sales figures.

No commissions are paid at all, she said. Her theory is that commissions tend to result in high pressure selling. The salesman will say anything to close a sale.

#### **Profit-Sharing Planned**

With a salary, on the other hand, he is not dependent on individual sales for his income. So he will consider the good of the company as well as himself.

To give the salesmen further incentive, she has told them that when the company reaches and maintains a certain level of sales, a profitsharing plan will be put into effect. She intimated that this may come about within two years.

In line with Radio City's emphasis on repeat business, Miss Williams depends almost entirely on direct mail advertising. The staff writes the letters and attempts to make them informal, personal, and witty.

The salesmen take turns typing them in their spare time. Through the letters, each customer is contacted about every four months, she estimated.

In the struggle to build up Radio City, it might be expected that Miss Williams has lost some of her romantic ideas about appliance retailing. After five years on her own, does she still like the business?

"Like it," she exclaimed, "Man, ah

#### Morning Parties Are New Promotion Stunt

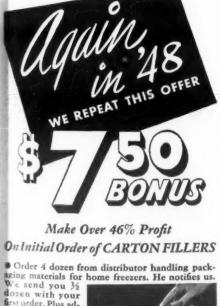
GALVESTON, Tex. — Early-morning "appliance parties" in which various major appliances from refrigerators down to home ironers are shown to groups of from 12 to 20 women, have helped to stimulate appliance sales for the Palace Furniture Co. here, according to A. E. McDonald, general manager.

The "appliance parties" are scheduled early in the morning, before the housewife has time to get into household chores, according to McDonaldwhich insures a full turnout.

All of the housewives invited are chosen from a "hot prospect file" maintained by salesmen, customer tips, telephone responses to advertising, etc.

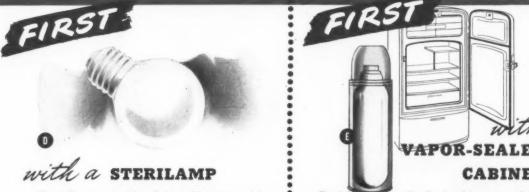
The store provides all transportation to and from the party, utilizing salesmen's cars, and taxis where necessary. Every appliance is put completely through its paces to the interested group.











Dual-Temp was the first refrigerator with Sterilamp which produces ultra-violet "sunshine" rays . . . to clean and purify the air . . . reduce spoilage by retarding mold and bacteria growth . . . prevent transfer of odor from "strong" foods. Still a Dual-Temp exclusive

**VAPOR-SEALED** CABINET was the first refrigerator with a vapor-sealed cabinet . . . the only one built

on the vacuum bottle principle. Moisture can never get in between the inner and outer cabinet walls . . . can never collect on concealed freezing coils. Still a Dual-Temp exclusive TODAY.



#### AUTOMATIC MOISTROL

Dual-Temp was the first refrigerator with the automatic Moistrol which collects . . . and automatically evaporates . . . excess moisture in a plastic drip-tray outside the main food compartment. No odors . . . no mess . . . pletely sanitary. Still a Dual-Temp exclusive!



PROVED PERFORMANCE IN OVER 200,000 KITCHENS

DUAL-TEMP

Easily SOLD . . . Stays SOLD . . . Once SOLD, Sells ANOTHER

## Big Volume Essential for 100% Pre-Packaged Meats, Store Operators Told; 178 Now Use It

CHICAGO—There are probably not more than 15,000 to 20,000 food stores in the country doing a volume large enough to consider changing their meat departments over to a 100% self-service pre-packaged operation.

And as of April 1, 1948, there were only 178 markets operating on such a basis, although close to 5,000 markets may be offering self-service meats in addition to the conventional service operations.

These were some of the important thoughts of one of the country's largest packers—Armour & Co.—presented by Armour Vice President Walter Shafer in a down-to-earth talk before hundreds of supermarket operators attending the eleventh annual convention of the Super Market Institute at the Hotel Stevens here recently.

Shafer's talk was one of four given in a symposium on self-service meat operations, a topic which was of prime interest to the operators, judging from the attendance and their earnest attention.

#### Question Is Uppermost

"The question uppermost in the minds of nearly every retailer we talk to," he said, "is: 'should I get into self-service meats, and, if so, should I go 100%, or, should I go only partially self-service?'

"In 100% self-service, all meats are pre-packaged and sold entirely on a self-service basis. In partial

self-service, the customer may buy her meats through a conventional service meat department or help herself to the meats displayed in one or more self-service cases.

"In our attempt to answer this major question and many related questions which arise from it we have gathered data by talking to retailers, equipment manufacturers, paper suppliers, editors of trade magazines and others.

"Furthermore, we have also utilized (a) the vast Armour sales organization to make a current survey of complete self-service meat operations, and (b) the valuable experience that our company has gained with self-service products and problems in our laboratories and in carefully controlled sales tests.

#### 30,000 Cases In Field

"It is estimated that, exclusive of frozen food cases, retailers have bought some 30,000 cases that could be used for self-service meats," Shafer said.

"The actual use of these cases is not known. Some are used for dairy items; some for cold cuts and salads; some for smoked meats; and some for fresh meats.

"There is no accurate figure on the number of stores on a partial self-service meat basis, but the number is increasing daily. It is doubtful, however, if the number exceeds 5,000.

"The addition of one or more self-

service meat cases to supplement the conventional service operation seems to us a move in the right direction where a retailer can find the room and has sufficient store traffic to justify it. Many meat products are already being offered by packers in pre-packaged form that lend themselves especially to self-service. Many more such products may be expected in the future.

#### Trend Will Continue

"The trend toward partial selfservice will, in our opinion, continue at an accelerated rate. If equipment is available, we can expect an increase this year.

"We sent a questionnaire to the entire Armour sales organization requesting them to supply us the names and addresses and certain pertinent information about each retailer on a complete self-service meat basis. We found that as of April 1, 1948, there were 178 complete self-service meat departments. This figure is reasonably complete.

"Meat departments doing even 75% of their meat business on a self-service basis have not been included in the list.

"Two-thirds of these 178 markets are independently owned; 58 are operated by local or sectional chains; only 6 belong to the national chains.

"We have prepared a map to show the location of complete self-service meat operations. Concentration is

Handle Spring

WEDGETIGHT FASTENER

greatest in Southern California and in Texas: 40 in California and 19 in Texas. In 13 states we did not find even one complete self-service meat operation. In New England we found nine; in Metropolitan New York, 10; in Kansas City, one; in Chicago and St. Louis, none.

"More than half of the complete self-service meat operations are less than a year old. Before the last war less than ten stores pioneered this new method of merchandising meats. The war held up expansion. Beginning in the spring of 1946 some equipment became available and a few more operations were added. By April, 1947, there were about 70; by April 1, 1948, nearly 200.

"Sales of these markets range from less than \$1,000 to \$25,000 a week," Shafer said. About 34% report sales under \$2,000 a week; 56%, sales of \$2,000 to \$10,000; and 10% sales of \$10,000 per week and over. The biggest single group is \$2,000 to \$6,000 per week. The chains had relatively more stores in the larger volume classes than the independents.

"Sales usually go up with selfservice, especially on offal products, cold cuts, smoked meats, and poultry. The reasons are logical. Ordinarily these items do not receive much attention or display space. Also, these items often look less appetizing in a service meat case than in a selfservice case. Pigs feet and similar items take on special sales appeal when pre-packaged in a transparent wrapper and displayed in a selfservice case.

"Markup generally goes down in the beginning, due to initial mistakes. Closer attention to exact weights and customer requirements in trim and cut may show up in lower markup at least at first.

#### **Operating Cost Elusive**

"Operating cost is the most elusive factor to pin down. In general, operating costs are not lowered in a complete self-service meat operation. Wrapping material costs are higher, and frequently so are labor costs. With experience the job is done more efficiently, and costs usually begin to go down, but positive proof is lacking that important savings in costs have been generally realized to date. The fact is that most of those in complete self-service do not yet know how costs compare with service.

"Profit often disappears entirely in the early stages. Generally, if the operator is able to show some progress as the months go by, and if he is not discouraged too easily, he can usually begin to see reasons for continuing with complete self-service.

"Without exception, the self-service operator tells us that the *principal advantage* of self-service is that it eliminates the bottle-neck at the meat counter, especially on weekends. We are also told that the vast majority of customers like self-service because they do not have to wait in line or hurry to make a choice, and are not likely to be slighted by a pressed butcher.

"Self-service usually increases sales, especially on certain products, as has already been pointed out. It

#### Proper Temperatures for Self-Service Meats\*

 Smoked meats (ham, bacon)
 40 F

 Fresh meat
 36 F

 Luncheon meat
 30 F

 Dry sausage
 40 F

 Frankfurters
 36 F

 Fresh pork sausage
 34 F

\*As suggested by Armour & Co.

provides the opportunity for be tercontrol over the meat operation; enables greater standardization of cutting, trimming, and packaging; and permits the display of a vide variety of meats at all times, especially important where the store is open evenings. While the operation is still relatively new, it offers greater opportunities for publicity and rierchandising.

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"Principal disadvantages have to do mostly with the relatively short shelf life of pre-packaged meats, the high cost of labor and packaging materials in some instances, and the problem of working out production schedules to coincide with the peaks in buying. These problems are not insurmountable where sufficient volume exists, but sometimes these problems can become more troublesome and costly than the advantages gained.

"Another disadvantage which looms very large in the minds of some retailers is the virtual disappearance of personal contact between the dealer and his customers. Some self-service operators try to overcome this problem to some extent at least by using hostesses.

"Retailers of self-service meats are interested in more 'know-how' on every phase of self-service meats. We are now working on a booklet on self-service meats which will be available soon.

#### Proper Temperatures Basic

"Proper temperatures are basic. Cutting and packaging room temperatures should be maintained between 45° and 50° F.; the holding cooler between 34° and 38°; the self-service case between 34° and 38°. A separate case for various products is ideal but not practical for most retailers. Present cases fluctuate from 4° to 8°, and temperatures vary at different levels in the case. This needs your close attention in your store.

"Fresh red meats and pork sausage should be kept at temperatures slightly above freezing; smoked meat and dry and semi-dry sausages at 38° to 40°.

"Meat discolors under natural and artificial light. Discoloration appears to be dependent entirely on intensity of light and length of exposure. White fluorescent light gives the product a bright, natural appearance initially, but does not prevent discoloration.

"Keep meat away from light as much as possible in the cutting wrapping, and storing rooms.

"No one type of wrapper is ideal for all meats. One film is best for (Continued on next page)

# Features that make a "BEST SELLER" of the JAMISON STANDARD COOLER and FREEZER DOOR

Because of its wide range of applications in moderately low temperature operations, the Jamison Cooler and Freezer Door far outsells any other type on the market. Adjustoflex Hinges, Wedgetight Fasteners and Coolerseal Gaskets give you smooth operation and positive closure.

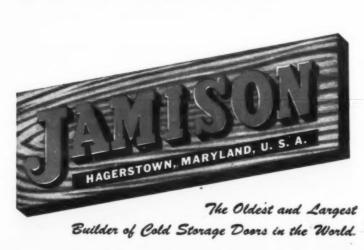
ADJUSTOFLEX HINGE—(See Sketch) combines self-adjustment with spring tension regulation. Spring pressure automatically seats door gasket. A simple turn of adjusting screw alters spring pressure to compensate for gasket wear.

MODEL "W" WEDGETIGHT FASTENER —(See Sketch) is simply designed for extremely easy operation and minimum wear. It takes little effort to pull the outside operating handle which automatically opens the door. Operation of the push rod opens the door from the inside.

On closing, the fastener wedges the door tightly shut without rebound. Once closed, only normal operation of the fastener can open the door. The wedge is bored for use with locking pin and padlock. This Wedgetight Fastener is of modern, streamlined design to harmonize with the Adjustoflex Hinges. There are no protruding parts to catch, bend or break.

COOLERSEAL GASKET—(See Sketch) is applied in two locations to form a positive seal. The outer seal is placed on the back of the door front overlap and seats against the casing. The inner seal is fixed to a rabbet strip securely fastened to the jamb. The door is designed to insure simultaneous seating of both seals, creating a dead air space between seals. The Coolerseal Gasket is made of pure rubber—extremely resilient, durable and waterproof.

Whatever your requirements in Cold Storage Doors, the chances are that you'll find Jamison's standard products in many types and sizes will fit your exact needs. Or if you have an unusual problem, we are well equipped to furnish doors to any specification. Write for catalog and the address of our branch nearest to you. Jamison Cold Storage Door Co., Hagerstown, Maryland.







#### Chain Stores Offer Brightest Prospect For Complete Self-Serve Meat Operation

(Concluded from preceding page) fresh red meats; another for luncheon meats, frankfurters and pork sausage; still another for dry sausage, sliced bacon and similar products. Learn which is best for each product.

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Our survey turned up only a handful who expressed dissatisfaction with results to date. Everyone of these had weekly meat sales of \$1,000 or less.

There is no definite proof that costs have been reduced significantly with self-service meat. Certainly, costs don't go down automatically with self-service.

"It will be safer for most retailers -and especially the smaller ones-to move cautiously into pre-packaged meats," Shafer suggested. "In general, it is dangerous to set up a complete self-service meat operation where volume is under \$2,000 weekly. Some retailers with complete selfservice meat experience place the minimum volume considerably above

"The typical retailer might start with partial self-service with essentially uniform items which are easily pre-packaged, and on which there is usually an opportunity for more sales, such as cold cuts, sausage and smoked meats.

"Get your feet wet with these items. Make your mistakes on a small basis. If you are not successful with these items, don't bother about fresh meats.

"Some people disagree with this approach. They hold that the only way to get into self-service is to get into it 100%, because otherwise you can never really find out the real merits of self-service. These people may be right. Nonetheless, we advise the typical retailer to move cautiously into self-service meats.

"Here are the 'ten commandments' for success in complete self-service, as we see them:

"1. Heavy store traffic.

"2. Transient or shopping area

"3. Personal interest and attention of owner or manager.

"4. Initiative and imagination. Be progressive.

"5. Courage to see it through.

"6. Necessary capital. Conversion to self-service is costly.

"7. Experience in the retail meat business is a must.

"8. Complete honesty with the customer. You must not try to take advantage of the customer.

"9. Careful planning to avoid serious bottlenecks.

"10. Employment of the same sound selling practices that have proved successful in a service operation. Nature of meats does not change with self-service.

"Of the 375,000 independent grocery and combination stores, only 3,300 do over \$300,000 annually and another 5,500 do from \$200,000 to \$300,000—a total of 8,800 stores doing over \$200,000 annually. If we assume that meat volume is 25 to 30% of total sales, then only the top 8,800 independents do better than \$1,000 a week in meats and only 3,300 approach or exceed the \$2,000 figure

"Clearly, the great bulk of independents are not logical candidates for complete self-service meat operation.

"The possibilities for complete self-service meats are much brighter among chains. Of the 30,000 chain store units, we estimate that 40%, or roughly 12,000 units, do over \$200,000 annually. Combining chains and independents there are some 20,000 units with sales of over \$200,-000 annually. These represent the possibilities for complete selfservice meat.

"What are the packers doing about pre-packaged self-service meats?

"I can only speak for Armour & We have designed products and packages especially for self-service. ome of these are in distribution nationally; others are only locally as et; and still others are in the test

"For example, our new 1-lb. frankfurter package, the result of extensive laboratory and sales tests, is deal for self-service. A consumer size package of smoked pork sausage. similar to the frankfurter package, will be made available generally as quickly as possible. Our various self-service packages of fresh pork sausage include some that have been

standard with us for years, and others that are relatively new.

"Bacon packages especially lend themselves to self-service. Our new vacuum-packed package holds the original flavor and appearance of the bacon. Also ideally suited for selfservice is our bacon package with a cardboard back and a maximum of transparency. Both of these packages are now available in only certain sections of the country; we hope to make them available nationally as soon as possible.

"Smoked meat items can be made ideal for self-service. We believe we have done this with our picnics in a new transparent wrapper, with our smoked pork shoulder butts in a similar new wrapper, and with our smoked beef tongue which has been on the market for some time now in the new wrapper. Our pork jowl bacon in a transparent wrapper gives

this product self-service appeal. "Ideally adapted for self-service selling are ring bologna, 8 oz.,

cervelat, 8 oz., dried beef in transparent packages, and chili in a consumer package.

"Sausage items which we have been putting up in consumer size packages of approximately 1 lb. for self-service only in a limited way so far include Braunschweiger, bologna, salami, and thuringer. We hope to make these pre-packaged sausage products more generally available.

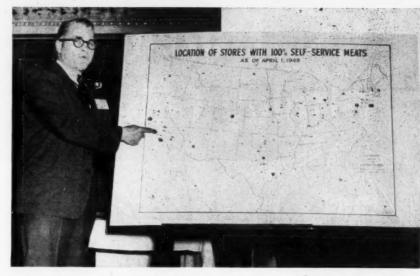
"These are the products which we know we can make available for self-service. How far we can go beyond this is not clear at this time.

"So far as fresh red meats, such as steaks, chops, roasts, etc., are concerned, from what we know at present, it is doubtful that we can even think seriously of pre-packaging these items for self-service for a long time to come.

"Cold cuts and luncheon meats when sliced and pre-packaged too far ahead of sale, lose some color, sales appearance and, perhaps most serious, some of their flavor.

"We intend to continue to explore

Where 100% Pre-Packaging Is In Force



Walter Shafer, vice president of Armour & Co., points out the location of stores now going all-out on self-serve meat merchandising.

the possibilities of all our products which may conceivably lend them to self-service. There is always the

possibility that some new technical development or discovery will make it possible to develop new items."



As soon as I explain the KOCH sales story to a prospect, it is easy to close the sale. My customers are satisfied, I rarely get service requests. My selling costs are lower. I can make my normal mark-up on each KOCH fixture. Every way I figure it, the KOCH line means a generous profit, that I can count on from month to month and year to year.



42-CU. FT. SELF-CONTAINED KOCH REACH-IN. Equipped with oversized 1/3 H. P. condensing unit, specially designed evaporator that converts power into controlled humidity of properly chilled air. Also available in 65-cu. ft. size, with 1/2 H.P. unit.



AUTOMATIC DEFROSTER. High humidity. Brilliantly lighted. Welded steel construction. Made in lengths of 10-ft. and 12-ft., double duty or top display cases. Also 6-ft. long double duty case for either remote or self-contained application.

#### STAINLESS STEEL INSIDE AND OUT

KOCH 25-cu. ft. refrigerator, self-contained. With either ice maker or forced convection evaporator. Welded steel construction. No wood used. Made in the 25-cu. foot size only.

A TRULY POST-WAR REFRIGERATOR SANITARY ... ECONOMICAL LASTS A LIFETIME!

During the war the United States Navy discovered the need for an allmetal refrigerator made of stainless steel. KOCH designed and manufactured thousands of these for the Navy, and now makes them available to civilian users. The strength, durability, and economy of heavy gauge stainless steel are unbeatable.



KOCH Equipment is extra profitable for users also. It pays a big BONUS in increased store traffic and extra sales. It eliminates spoilage losses, reduces shrinkage of merchant's stock of food.



NORTH KANSAS CITY 16, MISSOURI

KOCH IS YOUR LOGICAL BUY FOR THESE PROSPECTS: Food Markets, Hotels, Dairies, Restaurants, Institutions, Taverns, Hospitals.

## BTC Frozen Food Display Cabinet



... the Grocers' Sign for Sales



**Stainless Steel Top** Vapor-Sealed Insulation Motor, 110-120V. Compressor, 1/3 hp.

Model DC-12-2 Capacity 12 cu. ft. Floor space 28" x 76" Over-all height 66"

## **Clear-View Superstructure** Full Length Display Mirror Removable Thermopane Lids **Bonderized Steel Construction**

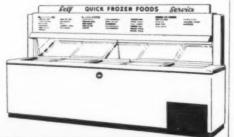
Actual store tests have demonstrated that the right equipment will increase frozen food sales by at least 50%. BTC Display Cabinets sell frozen foods by the proven methods of open, easy-access display and constant temperature for uniform quality.

The BTC symbol means a frozen food cabinet tested for greater sales and better performance. Start right by having your equipment distributor install a sales-tested BTC Display Cabinet - 121/2, 18, or 23 cu. ft. capacity. Write for illustrated catalog.

Model DC-18-2 Capacity 18 cu. ft. Floor space 28" x 981/2" Over-all height 66" Motor, 110-120 V. Compressor, 1/3 hp.

Model DC-23-2 Capacity 23 cu. ft. Floor space 28" x 121" Over-all Height 66" Motor, 110-220 V. Compressor, 1/2 hp.





THE BREWER-TITCHENER CORPORATION BINGHAMTON, N. Y.

## Self-Service Meats Create No Shangri-La, Cooke Cautions Supermarket Operators

CHICAGO-"The meat cutters in a self-service meat operation go in the back room and play around with the machines. Out in front the market operator puts a hostess to deal with the public.
"Listen, gentlemen, you're not run-

ning a night club,"

In such half-serious, half-humorous cryptic statements, James Cooke of the Penn Fruit Co., operator of large supermarkets in Philadelphia, recounted some lessons his firm had learned from self-service meat operations for the benefit of supermarket operators attending a symposium on the subject during the eleventh annual convention of the Super Market Institute at the Hotel Stevens here.

"Self-service," he emphasized, "is only a method. You can be a good meat merchandiser or a bad one, with or without self-service.

"Our company has been in selfservice meats only since July 20, 1946. We now have four fresh meat and five delicatessen departments on self-service. However, until January of this year our self-service experience was confined to one store. It is obviously dangerous to generalize from such limited experience. Any conclusions may be proved wrong with a variation in production methods, management, neighborhood, or in the price situation.

"Our experience has been during a period when prices and conditions have been abnormal, to put it mildly. In the operation itself it has been a period of trial and error, when even the craziest idea got a hearing. Whatever we say, therefore, is emphatically tentative. Six months

Reports on other discussions that took place at the Super Market Operators' self-service forum will appear in the next issue.

from now we might be very eager to deny the authorship of these remarks. It's very hard to make generalizations at the present time.

"One more qualification: our operation is not particularly typical. Whatever we say is predicated on a weekly tonnage per store of 50,000 lbs. of fresh meat, poultry, smoked meats, cold cuts, and delicatessen combined.

"These, then, are some of the reasons we hesitated to take on this assignment. If those of us in selfservice meats have anything to offer it is very much like the one-eyed man in the Kingdom of the Blind. No one knows very much about the subject.

"Compared with service departments, our self-service meat set-ups do 3% to 4% more of the total store's volume. Right now, this is a doubtful blessing. Further, the store thus equipped is in a better position to handle bigger volume because of the quicker turnover of people. We get as high as \$200 per running foot of case. This is subject, however, to some very important reservations:

"First, you have to get the stuff out during rush hours. That's a big Adequate space must be provided in front of the cases. Your cash check-out facilities must be in

#### Is Time Really Saved?

"Obviously if the time saved at the meat counter is lost because people pile up more quickly to wait at the check-out lines, little or nothing is gained. Long-suffering Mrs. Consumer will answer your proud expectant smiles with a 'so what?--whatever time we save at the meat counter we waste by waiting longer at your check-out lines.'

"The traffic in our particular setup has compelled us to provide more space in the aisle, in front of the self-service meats, than is required in front of a service set-up. This is especially true where the merchandise has to be brought down the aisle to replenish the cases," Cooke declared.

"In merchandising we have learned that where all poultry is offered eviscerated, the high price ticket resulted in lower sales. This will probably continue to be the case until the customer is educated to realize the value is the same-eviscerated or uncleaned.

"In our recent installations we have kept all uncleaned poultry in a small More Refrigerated Storage Interests Visitor



Mrs. William Joseph, wife of a Peoria, Ill. market operator, learns from Al Serpa, Chicago regional manager for Weber Showcase & Fixture Co., how much more refrigerated space is provided by the addition of bottom storage in the new Serv-Master double-duty open display case.

service counter. This enables us to put the undrawn price on the merchandise and also avoid the expense of double wrapping.

"In our original self-service setup we presented poultry uncleaned and permitted customers to have it cleaned at our service booth which necessitated double wrapping.

"You can't afford that. There's a question even whether you can afford to wrap it once!

"Hams are another item that has not particularly lended itself to selfservice. After a short while the cellophane takes on a greasy smear and gives a dead, unappetizing appearance. In addition, hams are an item that require constant facing and merchandising. In our stores this item sells in sufficient volume to justify a small service set-up. Naturally, companies operating smaller units may not be in a position to make these variations in the

merchandising of poultry and ham. "Experience thus far indicates that the ideal size of a package in selfservice is smaller than in service. A wide range in the size of packages is also essential. The tendency at the present time appears to be to a smaller unit, but Mrs. Consumer seems to buy more of them in selfChe

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"The alleged advantages of selfservice often remind me of the gadgets that are guaranteed to give your car more mileage from the same amount of gas," said Cooke.

"The gimmick in the deal, however, is the little proviso that the guarantee is dependent on a general tuneup of your car. It's always a question of how much of the improvements came from the tune-up and how much was a result of the gadget.

"Part of the success in self-service meats is the attention the department gets from the company executives. In itself, self-service meats is not

"Supermarket executives often ig-(Concluded on next page)



## **HEAVY DUTY BEER COOLERS**

by Temprite

Out of production since before the war, Temprite heavy duty beer coolers are back again to help you make more money. Now is the time! This is the season! Tell your customers

about Temprite. You can now offer 7 new improved models for every type of beer cooling application. Outstanding features include specially shaped stainless steel coils, compact size and patented temperature control.

Write or wire now for details.



## Wrapping, Pricing, Display, Appearance All Provide New Problems for Meat Manager

(Concluded from preceding page)
nore the meat department and let it
go to pot. Then they hear about
self-zervice, install it, watch it
closely. Because the bosses are right
there, the employes work at it better.
Meat sales go up, and then selfservice gets the credit.

eYou can break your neck with equal ease in self-service or in service if the meat isn't good or is not properly serviced, rotated, and otherwise properly managed. As a matter of fact, you can break your neck quicker in self-service.

"A service set-up polices itself better than self-service. Customers will somer forgive a mistake in service than in self-service. They'll say to themselves, "I'll watch that butcher closer the next time."

"Once in a package, however," Cooke explained, "merchandise becomes a 'pig in a poke.' When confidence in the package is violated, it is hard to regain.

#### Check Up on Date Codes

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"Most of us code our packages and glow like a Boy Scout at our good deed. Without check-up and enforcement, however, I have seen these codes blithely ignored. Packaging in advance is not good, for meat rapidly looses its bloom. That's a high problem in self-service operation.

big problem in self-service operation.

"It is also important to establish a definite policy on expiration dates for each type of merchandise. There is no particular point in setting up an elaborate code system without establishing a definite dead line when merchandise has to be inspected and rewrapped.

"Our people started a game with the expiration dates, trying to see who could fool the boss the longest. In addition, in looking over the displays the clerks tend to look at the dates rather than at the merchandise to see if that was still attractive and saleable.

"In production, there is a big headache to maintain full cases when the store is busy. Unlike other self-service departments, the time you save the customer in self-service meats costs you money. In service the customer waits until your clerk gets around to her. As he assembles the three or four purchases for each customer, the clerk combines them in one big package.

"Not so in self-service. Instead of the customer waiting, in self-service you must have the merchandise packaged up in advance. In itself this costs more money than wrapping merchandise as the customer buys it —imposing on her time.

"In addition, each item has to be individually wrapped—real 'purty' and particular, too. You lose the saving of combining of three or four purchases in one package. Furthermore, the customer in self-service, on the average, prefers a smaller size package. The small package also anticipates the widest variety of requirements.

"While hand wrapping appears to be adequate in departments handling up to 20,000 lbs. of fresh meats, our production bogged down beyond this point. It seems that when you get beyond 20,000 lbs. in fresh meat, it is almost impossible to get the merchandise out on time by hand wraping.

"We found it practically impossible to crowd enough employes in the space and time available to get the stuff out. With such an unwieldy group of employes it was very hard to achieve any pace or supervision. To cope with this problem we have installed machines in all our self-service meat operations.

"The machine-wrapped package does not compare in appearance with the neat, tailored hand-wrapped product. The time and expense factors, however, make hand wrapping impractical beyond a certain point. In fresh meats we use the machine to wrap 75% of our packages. Roasts are hand-wrapped.

"In the case of luncheon meats it has been our experience that hand wrapping is faster. The machine requires cardboard backing. The cost of the board and the labor involved make this impractical—not to mention the loss of visibility.

#### Store Methods Are Primitive

"Wages, hours, and working conditions in our field today compare very favorably with industry. Our methods, however, are primitive compared with industry. We believe that it is important for our future to straighten out this contradiction. In groping for improved production methods we have leraned certain fundamental lessons in the meat operation.

"In the first place, we have found that a horseshoe arrangement is a better layout than the straight line set-up. In this arrangement we find that it is possible to set up a control table in the center from which it is easy to supervise the wrappers and A 'Fall' Model for Year-Round Produce



C. V. Hill Co.'s new self-service case, Model 236, which will be available in the fall, is claimed to have a number of features which improve the open display of produce and vegetables. Mr. and Mrs. Henry Lerner, who operate a supermarket in Milwaukee, check over the produce on display in this case. It has a 31-in. mirror and 45-in. deep display.

supply them with merchandise and labels, cellophane, and so forth.

"Much of the slow-down in production is caused by the difficulty of scale reading, particularly with the present high prices. The limited range of our scale charts demands almost a knowledge of calculus to compute prices. When left to their own resources, wrappers will use as many as three different methods in computing the same price. Some of these methods are highly inaccurate and costly.

"To solve this problem we are instituting a definite procedure and chart to compute each price. This is a temporary expedient. To reduce fatigue and strain, we switch the wrapper and the weigher at periodic intervals. As a more substantial solution, we have devised a scale modification to facilitate the operation. It is a fan type scale and has

a separate chart for each price. The scale is built for instant insertion of the proper price chart. We believe this will speed up the operation and reduce errors, once it is perfected.

"Rewrapping has been another production problem. Due to the fading of cold cuts—particularly those with high pork content—rewraps run as high as 10%. Obviously it costs more to rewrap a product than to wrap it originally. Thus rewraps cost more than double the ordinary package.

"Part of this can be avoided by

not overloading the cases and reducing the amount of exposure to the light. In fresh meat roasts the rewraps run also about 10%.

"We recommend that a record be

"We recommend that a record be kept of rewraps so that the type of merchandise and the cause of the rewraps can be traced and eliminated."



## WILSON REFRIGERATION, INC.

- FARM AND HOME FREEZERS
- REACH-IN REFRIGERATORS
- WALK-IN REFRIGERATORS
- DIVISION OF WILSON CABINET CO., INC. SMYRNA, DELAWARE







#### CLARK BRIDGMAN CO. 549 W. WASHINGTON BLVD. CHICAGO 6, ILL.

Sales and Engineering Product Coolers, Evap. Condensers Air Conditioning, Liquid Coolers Water Chillers, Heat Exchangers Liquid Receivers

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#### WALTER HERVEY JUNIOR COLLEGE

Two-year course—college credit. Unique co-operative plan of alternate work and study. **CO-EDUCATIONAL** REFRIGERATION . RADIO BUSINESS ADMINISTRATION MERCHANDISING OTHER COURSES

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#### SURPLUS FOR SALE

Surplus metals, builder's hardware, electrical and refrigeration accessories, electric motors, paints, and lumber, all below market prices.

Contact Mr. R. L. Stehman or J. E. Curnow,

SUPER COLD CORPORATION 1020 E. 59th St., Los Angeles 1, Calif.

## by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

#### Case History

Otto Richter was a Skid Row junk collector who half-soled his own shoes by nailing old tire casings to their frames, and who wore the wormiest clothes you ever saw-yet, when he died recently in Detroit, he left a \$50,000 estate.

Otto invested his small savings from the wages he earned as a factory sweeper, and spiraled them upward by a series of shrewd stock market investments.

For 25 years he had dwelt in cheap Griswold St. rooming houses, refusing to allow a stove or refrigerator in his room—as an extra dollar charge for those luxuries would have been added to his \$3.50 per week rent.

When winter reached its most tempestuous stages, and he was no longer able to collect old papers and rags, he entered a Wayne County institution for the aged, feeble-minded, and destitute.

Despite this voluntary self-immolation and privation, he deposited a sizable fortune in several Detroit banks when he liquidated his common stock holdings on March 6, 1947. He placed \$15,000 in First Federal Savings and Loan; \$11,000 in Detroit & Northern Michigan Building & Loan; \$10,000 each in Surety Savings & Loan, and Standard Savings & Loan and \$5,000 in Federal Savings &

About a week after these deposits had been made, the Dow-Jones industrial averages dropped 12.12 points. Although a few temporary rallies occurred, one month later the averages were down another 12.50 points, bringing the index down to 166.69.

Otto Richter, the Skid Row derelict, wasn't so dumb after all.

Friend of ours who dealt with Otto recalls one occasion during the period when the supposed derelict owned more than \$50,000 worth of sound common stocks. Otto, badly in need of a shave, called at his office. Excusing his appearance, Otto explained that he had been unable to shave in the dark, as his electricity was shut off. He had not paid the bill.

Mrs. Berneice Merrill, public administratrix in charge of the Richter estate, disclosed a number of Otto's investment interests after he died. These disclosures should make all "dignified" investors pause and

On Dec. 31, 1946 he had a cash credit of \$42,194 in his broker's account. He was long on 500 Central Foundry, 300 Sinclair, and 280 St. Regis.

During January, 1947, he purchased 500 shares of Eagle Pitcher, 200 Phelps Dodge, 200 Celanese Corp., 200 Industrial Rayon and 200 Continental Motors. Shortly after, he also acquired 200 Superior Portland Cement, 200 A.T.F. Inc., and another 20 St. Regis.

By March 6, just prior to the market decline, his only remaining stock holdings were a few shares of copper mine, acquired in 1928, which were of no value.

A sizable portion of his holdings

were, of course, paid to the government in taxes. In 1940, Uncle Sam received \$11.25; in 1941, \$16.23; in 1942, \$14.28; in 1943, \$9.28; in 1944, \$51.73; in 1945, \$76.58; in 1946, \$67.30; and in 1947, \$10.76.

According to his 1944 tax return, he received \$3,840 during that year, \$1,761.48 of which he earned as a sweeper at Gar Wood Industries. The previous year he had made \$2,000 in the stock market.

By 1945, his total income had risen to \$7,782, \$3,328 of which represented his salary from Gar Wood. The following year, his total income amounted to \$15,817, of which \$2,341 was earned at Gar Wood. His tax for that year came to \$4,212.

He had not yet submitted his 1948 return on March 15th. However, a group of papers containing some neatly-written figures were found in a box, the other contents of which were 150 packs of used playing cards. Apparently, he had been computing his latest taxes when he was overtaken by The Grim Reaper.

There, good friends, is a story!

#### Good Deed

Orville C. Morrison, 38-year old president of the Sunroc Refrigeration Co. of Glen Riddle, Pa., has two great interests in life. One is making and marketing water coolers. The other is horses.

A turf enthusiast for years, Morrison makes it a yearly practice to take a party of friends each year to the Kentucky Derby. This year, due to pressure of business, he was unable to attend. In his place, however, he sent six wounded servicemen. They were the Cinderella boys of the Kentucky Derby.

Along with more than 90,000 other Derby fans, the six veterans (for whom the war isn't over yet, who never saw a Derby and never expected to) shouted home "Citation" as he led the field under the wire at historic Churchill Downs.

The six, all wounded veterans from St. Alban's Hospital, Jamaica, L. I., were flown from La Guardia Airport to Cincinnati and motored into Louisville with a police escort. They were put up at the swank Henry Clay Hotel, where their suite was heaped with flowers. They were wined and dined, and given a few hot tips, before taking their place in their own box looking out on perhaps the most famous racetrack in America.

Morrison, on whose factory grounds at Glen Riddle, the great Man O'War used to romp, is an intimate friend of Sam Riddle, owner and trainer of the late greatest horse of all time.

#### More Chances

The United States' new leading role in world trade and economy means vast opportunities for thousands of young men, says Dr. William A. Irwin, economist for the American Bankers Association.

"As America plays her new role and becomes still further interested in world economy, she must rear a new breed of men-men who will be willing to train themselves for service abroad in the diplomatic and trade services of their native country, in branches established by business concerns, and in more and more branches established by American banks on foreign soil," Dr. Irwin

Orville Morrison's benefactees can take this challenge from there.

#### Statisticians Are Phonies

"An organization called the Andersen Laboratories, of Brookline, Mass., issued on Jan. 7 a forecast that "commodity prices will enter upon a prolonged decline on about Feb. 6. 1948. That unequivocal prediction of the price collapse of Feb. 4 has brought considerable publicity to Frank A. Andersen, and recalled previous good prophecies on various wartime events, and the date of its end. From the Boston Globe we

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Corp.; frigerat Kelvina

Warner and W

colora

"'Andersen, who is 53, claims to have proved beyond a doubt that the Dow-Jones averages are almost exactly paralleled by the positions of the moon. . . . He says he is also able to make accurate predictions in such diverse fields as fishing conditions, human relations, and the occurrence of accidents.' Mr. Andersen offers his service for 22 months for \$2,000.

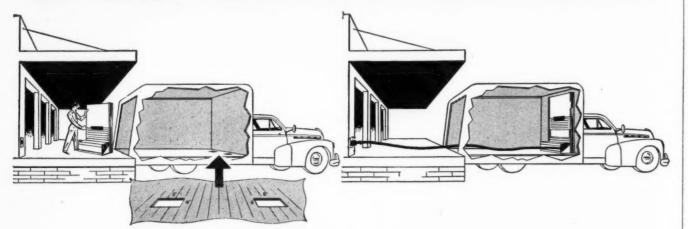
"The Chicago Daily News received Mr. Andersen's Jan. 7 forecast, but, alas, did not profit from it. In view of Mr. Andersen's clairvoyance we thought it was odd that it should have been addressed to Col. Frank Knox, president of the Daily News, who died April 28, 1944."-an editorial in the Chicago Daily News.

"Capitalism in its fullest sense has been only a convenient economic word used to describe a whole agglomeration of habits, relationships, thinking patterns, and methods.

"The agglomeration was an organic growth—it was never planned, never imposed by any superminds. No one thought it up, no one sat down to invent it; it sprang from the community spontaneously, as part of a necessary mode of expression at a given point of time."-Edw. R. Dewey & Edwin F. Dakin.

The only dehydrator with

## Here's NEW CONVENIENCE in Truck Refrigerat



## A complete, packaged TRUCK REFRIGERATION UNIT that you can install yourself

The utmost simplicity of the new Kold-Hold Packaged Refrigeration Unit pays dividends for you in lower Truck Refrigeration costs. Just push the Unit into the truck, bolt it in place and it's ready for operation.

The cooling cycle is started by merely plugging-in to any 110 volt electric outlet. Thus, you can build refrigeration in the truck wherever electricity is available. The "Hold-Over" Plates in the unit will maintain the predetermined low temperature of the truck throughout a day's deliveries.

What Is It? A complete assembly of all units necessary to adequately refrigerate an average truck 40° to 50° temperature for a day's run.

How Does It Work? Unit is shipped complete, ready to install. Push into truck, cut holes for air intake and discharge, bolt to floor and plug into electrical outlet.

Is Body Work Required? No. The unit is adjustable to fit most any truck. No "dog house" for compressor, no change of body or expensive installations are required.

How Long To Freeze Plates? Ample plate refrigeration for extreme weather conditions.

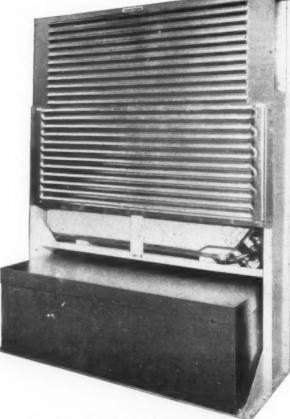
How About Long Runs? Truck Contents are easily protected on runs of 2 days or longer by simply plugging-in at any gas station, garage or overnight stop.

What Is Operating Cost? The 1 hp. compressor has capacity of 42,000 BTU's in 10 hours and operates for a few cents a day. Any refrigeration man can service if ever necessary.

How Does It Compare With Ice? The Kold-Hold Unit provides a more dependable refrigeration at less cost. There is no slime or bother.

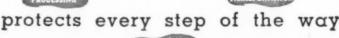
Is This New? It is new only in that it is a packaged unit. Kold-Hold Refrigeration Plates have given satisfactory operation for hundreds of users for over 15 years.

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New bulletin describes the many advantages of Kold-Hold PACKAGED Truck Re-frigeration. Write for your copy today.

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DESIGN . ENGINEERED FOR RUGGED SERVICE

"BALANCED DIMENSIONS"

Moisture Hasn't a Chance Here!

RAPID Refillable DEHYDRATOR

"Balanced Dimensions" in the new improved Rapid Dehydrator give proper ratio between length and diameter, and assure maximum dehydration

with minimum pressure drop. Other exclusive features:

Extra-heavy non-collapsible shell. One-piece shell. Removable inlet and outlet screens, permitting quick easy cleaning without damage. Finger type screens with extra-large screen area. Bronze coil spring protects outlet screen from collapse. Positive 3-point seal. End adapters doubly protected by brass caps and plastic dip seal.

YOUR WHOLESALER has Rapid Dehydrators in eight practical sizes: 5 to 200 cu. in.

#### RAPID DEHYDRATOR KIT

No. 1 help for servicemen...pays for itself. Saves extra trips to supply house. Assures impressively clean packages at installation. Compact, with 18 Rapid Dehydrators in 6 sizes. Sliding drawers for replacement adapters and gaskets. See this practical convenient kit at your Wholesalers. Today!

**BUY FROM YOUR WHOLESALER** 



#### 'Display Window' Is Right In the Appliance



**Unit Sales** 

7,400

16.112

53,810

8.479

10,679

5,427 13,149

26.097

17,626 6,080 25,388

2.715

1.537

14.977 2,721 48,413

62.049

6,796

3.550

38.075

1,608

12,474

10.933

Sales-by-States of

In First Quarter

Electric Refrigerators

Alabama ..... 11,627

Connecticut ..... 12,927

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Iowa Kansas

Idaho .....

Maine ..... Maryland Massachusetts

Nebraska .....

Ohio .....Oklahoma .....

Oregon
Pennsylvania
Rhode Island

Wyoming ....

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Something new major appliance demonstration models is "window" cut into Hotpoint electric water heater. Dwight Anneaux, manager water heater sales for Hotpoint, points to the Thermosnap automatic temperature conwhich prospects see through the window.

#### Crosley Plans Warehouse To Even Production Load

CINCINNATI - The Crosley Division, Avco Mfg. Corp., will soon start construction of a large warehouse adjacent to its refrigerator plant in Richmond, Ind.

"The company is manufacturing a complete line of models for various uses, and it is the company's intention to manufacture on a uniform schedule as far as possible throughout the year," officials stated.

"Consumers do not purchase refrigerators in equal amounts during the year, and it is necessary to provide facilities for storing refrigerators in the off-seasons so as to have them available during the peak seasons.

"The warehouse will be capable of storing 50,000 refrigerators at one time. Dock space for shipment by truck and rail has been provided so that direct shipments may be made from the warehouse."

#### Food Stores Tie In with Frozen Food Movie Show

MILL VALLEY, Calif.-The local movie theater was taken over by the R & R Radio & Appliance Store here to stage a demonstration of the art of preparing frozen foods before a sizable crowd of housewives.

One of the main features of the show, and the major reason for selecting the theater to hold it, was the showing of a color film on the methods of preparing frozen foods and their uses.

"Everyone knows of refrigeration," explained Bill Stone of the store, "but few know about proper methods of freezing food to keep it."

Cooperation was also obtained from a food store and meat market, which offered packages of frozen foods and meats, including a frozen turkey, as door prizes for the event.

#### Philco Quarter Sales 17% over Last Year

PHILADELPHIA - Philco Corp.'s sales during the March quarter were 17% above those of the same period last year, John Ballantyne, president, has reported.

Barring unforeseen developments, he predicted that sales for the June quarter should compare favorably with those of the March quarter.

March quarter sales were given as \$58,661,000. Earnings were \$1,958,746.

#### Southern Universities Use Air Conditioning To Encourage Library Use

NEW ORLEANS - Students who formerly spent little or no time in the library at Louisiana State university here "because it was too hot" now find library facilities among the most pleasant on the campus-since a new 100-ton Carrier air conditioning system has been installed.

The air conditioning system, because of the relatively limited use of the library building, operates at a series of "stages" whereby one-quarter capacity is ample to keep the entire building at a cool, comfortable temperature during the early morning, and half-capacity required for the later afternoon, when the building is crowded with students, and sunload increases.

In Texas, the Southern Methodist university is air conditioning its Science building with the same type of system, as well as the main library.



Are You Leoking for An Easy Way to Handle Stoves, Refrigerators and Freezers?

Solve Your Problem with the New ROLL-OR-KARI Dual Trucks

Patented Step-On-Lift • Folding Handles Capacity 1000 Lbs. • Shipping Weight 40 Lbs. WRITE TODAY

THE ROLL-OR-KARI CO.

#### AVAILABLE FOR IMMEDIATE SHIPMENT, NEW SEEGER REACH-IN REFRIGERATORS IN ORIGINAL FACTORY CRATES

Model SCD-30 (30 Cu. Ft.) With Blower Coil only \$373.00 F.O.B. Chicago in lots of 1 or 2 ..... Model SCDIM-30 (30 Cu. Ft.) With Ice Maker Coil only \$427.00 F.O.B. Chicago in lots of 1 or 2.....

Full distributor's discount in lots of 3 or more

Complete with Hermetic Kelvinator Compressors Assembled—Ready to Operate

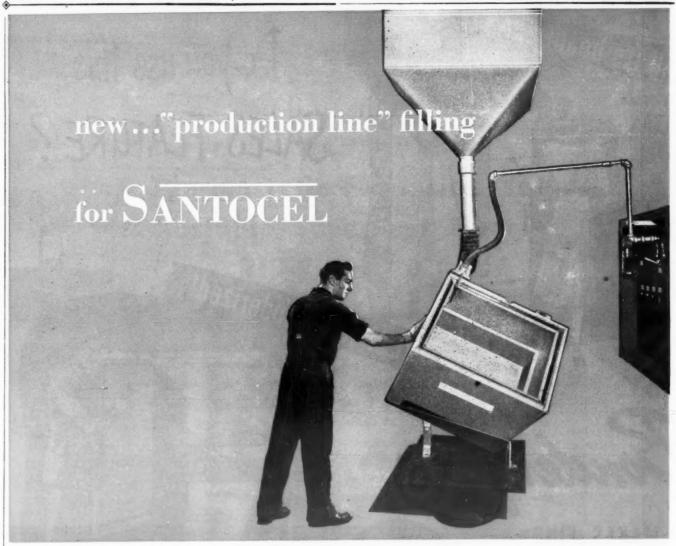
W. J. CONNERS

Suite 406, 540 North Lake Shore Drive, Chicago 11, III.



ENGINEERED REFRIGERANT CONTROLS

ALCO VALVE CO. ST. LOUIS



NATPACKAGED **Self Contained** AIR CONDITIONER 

- ECONOMICAL IN UPKEEP The Nat Air-conditioning Unit is so constructed as to be easily serviced.

The Answer to the Service-Man's Prayer

All working parts are accessible without having to tear down the cabinet.

> The NAT comes in 3 sizes: 3.3, 4.2 and 5.4 Tons

> The LAST WORD in Appearance and Performance

Sold through exclusive dealers and distributors some territory still open — inquiries invited

Corporation

Phone HA. 1892 . KANSAS CITY, MISSOURI The Nat Corporation also manufactures the NAT Suspended Gas-Fired Unit Heater one more reason

to switch from

insulation

Cor

Add

If you have put off using Santocel because you worried about how to handle this unique product on your production line, forget your worries!

A fast, smooth filling system, developed by Monsanto engineers, has made it possible to take full advantage of Santocel's double-value insulation.

Under this new system one man can operate the flow of Santocel into a cabinet which is filled full quickly, settled, then moved on automatically. You have just one insulation in one form, one size, to handle and to inventory.



CHEMICALS ... PLASTICS

MONSANTO	CHEMICAL COMPANY, Dept. ACM6, Boston	
use send me info	rmation on Santocel, on_	Santocel loading system.
ne		Title
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Iress		

#### They'll Do It Every Time . . . . By Jimmy Hatlo



## Do You Have 'One Foot In the Door'?



In selling home equipment, finish is a big factor. It has to look well to sell.

And it has to keep its good looks through years of service if your customer is going to be

When the product is Bonderized, you can assure your customer (and yourself) that its fine appearance will last. Bonderizing builds

a nonmetallic coating of phosphate crystals over and integral with the metal surfaces. These crystals give the paint a firm anchor, resist corrosion, and promote customer satisfaction by preserving and protecting the finish.

Use this sales feature to help you sell. You'll find that your customers know Bonderizing by name, and prefer it from experience because it makes finishes last longer.

Bonderite, Parco, Parco Lubrite - Reg. U. S. Pat. Off.

Parker

PARKER RUST PROOF COMPANY 2170 East Milwaukee Ave. Detroit 11, Michigan

BONDERIZING Holds Paint to Metal . . . PARKERIZING Inhibits Rust . . . PARCO LUBRIZING Retards Wear on Friction Surfaces

AN INTERNATIONAL INSTITUTION . SUBSCRIBERS ALL OVER THE WORLD

Trade Mark
registered
U. S. Patent
Office;
Est. 1926

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F. M. COCKRELL, Founder

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Subscription Rates: U. S. and Possessions, Canada, and all countries in the Pan-American Postal Union: \$5.00 per year; 2 years \$8.00. All other foreign countries: \$7.00 per year. Single copy price, 20 cents. Ten or more copies, 15 cents each: 50 or more copies, 10 cents each. Please send remittance with order.

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Volume 54, No. 6, Serial No. 1,003, June 7, 1948

## Best Dealers vs. Most --The Old Problem of Concentration vs. Coverage

**F**OR years the contest between *principles* and *practices* has amounted to an unholy type of ceaseless internecine warfare amidst the ranks of appliance distributors.

The *principles* which wise specialty distributors pay lip-service to tell them that guaranteed territories are important to their future solvency. But *practices* which are forced upon them by competition mislead them into enfranchising too many dealers, and cutting the pie into too many small pieces.

Distributors are under continual pressure to increase their volume of sales. Jobs are at stake, and so are reputations.

It's difficult to blame these distributors, then, if they yield to the temptation to add another dealer here or there for the sake of added temporary sales volume. They know better of course. They know that they are risking their future by milking the market and dissecting it into unproductive bits-and-pieces. Yet, they are high-pressured into it—both from above and below.

And some of them yield to these pressures. It's the easy thing to do.

After all, "everybody wants to get into the act"—including distributor's personal friends. An awful lot of opportunists believe sincerely that the appliance business will "go to town" during the next five years.

And these people are eager to get their "cut," even if they have few qualifications—outside of floor space, capital, and willingness to make a pile of dough quickly and easily—ror the exacting task of retailing major appliances and pioneering new products.

But let's look ahead....

Five years, four years, three years. Take your choice. At which point in the business cycle will the present extraordinary demand for home appliances, refrigeration, and air conditioning drop to a reasonable level?

Next Year? Possibly.

The year 1950? Most assuredly.

And then the territories which are "over-dealered" will be in a mess. They'll do nobody any good. Everybody will suffer—manufacturers, distributors, dealers, salesmen, and the public—it too many amateur cooks are spoiling the brotn.

It s time for most manufacturers to choose between extensive distribution and intensive distribution.

If they want to sign up the best dealers, they can't hire the 1/105h. The best dealers simply won't stand for that sort of thing.

These two distribution routes simply aren't compatible.

Give your franchised dealer a chance to *make money* on your line. Give him an ample guaranteed territory. Then watch him get 'one foot in the door' and go to town.

If you divide up his potentialities, you'll watch him lose interest in your line of products.

Like Gresham's Law (bad money drives good money into hiding) bad dealers disgust and discourage and disrupt good dealers.

A proper selection and backing-up of carefully-selected-and-protected best dealers, however, can lead to a marvelous esprit de corps, and w continued satisfactory volume.





2450 NORTH THIRTY-SECOND STREET • MILWAUKEE 10, WISCONSIN Export Department, 13 East 40th Street, New York 16, N. Y.



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REFRIGERATION VALVES

STOCKED AND SOLD BY GOOD REFRIGERATION WHOLESALERS EVERYWHERE . . . RECOMMENDED AND INSTALLED BY LEADING REFRIGERATION SERVICE ENGINEERS

## What's New

#### Heavy-Duty Draft Beer **Coolers Now Available**

DETROIT—Out of production since before the war, three newly designed heavy-duty draft beer coolers have

been added to a line manufactured by Temprite Products Corp. here.

Capable of dispensing 40° F. beer during continuous peak load demands, these new models will draw one or two different brands of beer plus cooled plain water and soda

water and are intended for use where beer kegs are located in a warm area and where no pre-cooler is provided.

These heavy-duty coolers are also ideal for use where long periods of heavy or continuous draught are encountered even though a pre-cooler is used or where pre-cooler size is relatively small.

The four medium-capacity models which complete the line will draw up to three different brands of beer plus plain and soda water and are intended to be used where beer kegs are stored in a pre-cooler or cool location and where the draft or load is relatively light.

All models are equipped with oval shaped stainless steel beer coils, specially designed to control both the rate of beer flow through the coil and the rate of cooling so that beer is dispensed from the faucet at the proper drinking temperature and with the correct percentage of head

According to the manufacturer, beer has no undesirable reaction whatever upon contact with new stainless steel. It is therefore unnecessary to wait for the customary "beer stone" to form on the inside of the coils inasmuch as the first glass drawn through stainless steel will be free from cloudiness.

Operating on a principle of direct heat transfer, each unit is equipped with an internal low-side float valve refrigerant feed and a constantpressure, temperature-control valve.

Dimensions of the largest model are 18 in. high by 8-in. diameter.

#### Coolerator Offers New 8.54-Cu. Ft. Model

DULUTH, Minn. - Production began last month on a new "king size" electric refrigerator of 8.54-cu. ft. storage capacity, the Coolerator Co. here has announced.

The new refrigerator, called the model DR-88, has 1.2 cu. ft. of frozen food storage space across the top and room for four ice cube trays (70 cubes). The regular food storage



space measures 7.3 cu. ft. Shelf area covers 16.5 sq. ft.

Outside dimensions of the new model are  $31\frac{1}{2}$  in. wide,  $27\frac{1}{8}$  in. deep, and 611/8 in. high. The cabinet is finished with a high bake synthetic enamel and insulated with 3 in. of Pneupro fiber. The evaporator has 1,703 sq. in. of surface.

Three interior shelves extend the full width of the cabinet. Immediately below the frozen food compartment are two small shelves that extend about one-third the way in from each side. They leave space in the center for tall bottles and other over-size containers. Two crisper drawers are provided.

Below the refrigerated compartment is a full-width storage bin.

Crated shipping weight of the model DR-88 is 356 lbs.

#### Toaster & Waffle Iron Combination Announced



NEWARK, N. J.-Newark Appliance Corp., Inc. has announced the addition of the Princess sandwich toaster and waffle iron to its line of Princess electrical appliances.

The new combination features aluminum waffle molds which are interchangeable with plates for grilling foods and toasting sandwiches, according to the manufacturer. Top of the new appliance can be laid back to provide two flat cooking surfaces.

It is finished in chrome and has cool wooden handles. It operates on a.c. or d.c.

#### New Method Will Seal **Cabinet Joints Tightly**



ST. LOUIS-Presstite Engineering Co., manufacturer of sealing compounds for industry, has developed a new method for sealing vertical or horizontal spot-welded flange joints in refrigerator cabinets or any spotwelded flange joints requiring sealing against air, moisture, dust, etc.

This new method uses Presstite Permagum placed into an extruded plastic channel, providing a foolproof positive seal easily and quickly.

working-hour time, energy. Write for catalog

...on your letterhead...today!

#### Water Cooler Designed for 'Dining-Car' Installation

GLEN RIDDLE, Pa. — Newest addition to Sunroc Refrigeration Co.'s line of water coolers is a small

unit designed espe. cially to answer the space problem in dining-car lunchrooms.

Called the Cafe 2B and nicknamed the "baby giant," the cooler is 15 in. square and 371/2 in. high. Over all shipping weight is listed as 175 lbs. It is said to de-liver 8 gals. of drinking chilled water an hour.

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The cooler operates with a watercooled condenser, is powered by a 1/5-hp., hermetically-sealed unit, and comes in one standard color-gunmetal grey. It is also available in stainless steel at a small additional

According to Sunroc, the cooler is "the first of its type in the field."

#### **Back Bar Base Uses** Diffuser Cooling Coil



PHILADELPHIA — Stainless Food Equipment Co. here announces it is now in production on two new refrigerated back bar bases equipped with the new "Kolstream" diffuser

Each of the two units, called "The Barclay" and "The Warwick," is being produced in three models: 4 ft. long with two doors, 6 ft. long with three doors, and 8 ft. long with four doors. "The Barclay" is 36 in. high with a 6-in., stainless steel back splash and "The Warwick" is 42 in. high (no back splash).

The units have stainless steel fronts, doors, tops, and interiors, according to the company. Ends and backs are of heavy-gauge aluminum (stainless steel ends are available for \$25 extra per end).

Other features are said to include 3 in. of approved insulation, automatic door light switches, removable heavy-gauge toe-plates, adjustable bell-type legs, and the diffuser coil.



## Announcing "LENCO" PACKAGED ROOM AIR CONDITIONER



PRICED TO RETAIL AT APPROX. \$250 PLUS FEDERAL EXCISE TAX AND INSTALLATION (DEPENDING ON LOCALITY)

COMPRESSOR: ½ ton Copelametic hermetic design capacitor type, mounted on springs to assure quiet operation—compact in design—115 volt 60 cycle AC, 1725 RPM single phase.

COILS: Condenser and cooling coils have copper tubes and fins. Both coils are of extremely large capacity to assure perfect operation. All tube connections throughout the unit are silver soldered.

FAN MOTORS: Both Condenser and circulating fan blades and motors are made by General Electric. Circulating fan is a 3-bladed one piece aluminum propeller type balanced to fan motor. A 4-blade condenser fan is used.

CAPACITY: The total refrigerating effect is more than 5500 B.T.U. per hour (Under normal conditions). The air conditioning fan handles 220 C.F.M. Watt input approximately 725. This unit is equipped with a coated spun glass air filter.

DRIP PAN TRAY: Entire internal unit mounted on drip pan tray which slides into outside cabinet on angle irons. Both front and rear cabinet fully insulated with the new asphaltic method.

OVER-ALL SIZES: 141/2" high, 26" wide and 26" long. Projects only 11 inches into the room.

CABINET FINISH: Beautifully finished in walnut baked enamel to blend into office or home

ROOM CAPACITY: Will cool rooms approx. 300 sq. ft. with normal height ceiling. (Depending on heat load.)

DAMPER CONTROL & SWITCH: Three position damper control permits adjustment of fresh air into room, exhausts stale air from room or circulates room air. Motor control switch, 3 position, "Off," "Circulator only," "Cooler".

WEIGHT: Net weight 180 lbs. Shipping weight 218 lbs. Shipped in solid wooden crates.

FACTORY GUARANTEE: Every Lenco Air Conditioner is completely assembled and carefully tested at the factory with one year factory guarantee. All component parts are manufactured by nationally known concerns.

#### ORDER NOW!

BEAT SUMMER'S HEAT

#### LOUIS ENGINEERING COMPANY

214 W. ONTARIO STREET CHICAGO 10, ILLINOIS

Phone DEL. 0263

LOUIS ENGINEERING COMPANY 214 West Ontario Street Chicago 10, Illinois
Please send information about the LENCO AIR CONDITIONER for   Dealers Distributors. (Check which.)
Company
Address
City Zone State



**Export Sales Division** SCHEEL INTERNATIONAL, INC.

THE SUPPLY HOUSE THAT SERVES THE WORLD . Wholesale Only



Fact

YO 1170

9 pc

#### What's New (Cont.)

pointed out.

plated steel.

manufacturer.

The lightweight tool is made of

high tensile manganese bronze, alu-

minum bronze, navy bronze, Duralu-

minum, aircraft cable, and cadmium

It is claimed that the hoist is suit-

able for use on any pulling job where

a chain hoist or block and tackle are

now used. Horizontal as well as

vertical pulls are possible with the

Price for the hoist ranges from

\$12 to \$18 depending upon the length

of cable needed, according to the



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#### 'Shearite' Cuts Screws Without Damaging Threads

HARRISBURG, Pa.—"Shearite," a pocket-size hand tool for cutting popular sizes of machine screws and cutting and stripping electrical wire, is being manufactured by Aircraft Marine Products, Inc., here.

Any of the four sizes of machine screws most used in electrical work may be cut off to desired length without burring or damage to threads, it is claimed. As a wire cutter and stripper, it is said to be suitable for sizes from 22 to 10 gauge. In addition it is pointed out that the tool is effective as a wire size gauge.

Shearite is made of high strength alloy steel, and is fitted with shock-proof plastic handles, according to the company.



#### One-Man Hoist Can Lift 1500-lb. Load onto Truck

DAYTON, Ohio — The American Gage & Mfg. Co., 125 Bayard St. here has recently introduced a new lightweight, one-man hoist, designed to make the work of hoisting, pulling, or wire stretching easier and less expensive.

Called "Pow'r Pull," the hoist has

#### FREON-12

All you want in 145 LB. KINETIC

**CYLINDERS** 

Call, Wire or Write
PENO ROBISON

Ft. Smith, Ark.

#### 10 DAY SERVICE

Factory Rebuilt Units \$4 250

- Genuine Grunow Parts.
- Guaranteed 6 months.
- Just unfasten bolts holding board and ship complete.
- Write for Service Manual and name of nearest Distributor.

GRUNOW
AUTHORIZED SERVICE, INC.
4515 W. Fullerton Ave., Chicago 39, Ill.

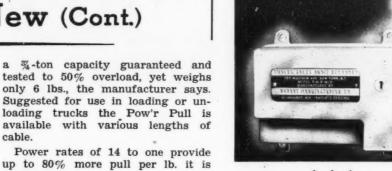
FOR SALE

BRAND NEW
YORK Ammonia Compressor
D-8 Style Y-38 with 50 h.p.
1170 rpm 220 V. 3 ph. 60 cyc. (NEW)
WESTINGHOUSE 100 h.p.
CONDENSER Unit

220 V. 3 ph. 60 cyc. Freon 12 lb. USED in EXCELLENT Condition
9 pcs.—DOLE—VACUUM TYPE
PLATES

Liquid Radiation, 4 shelves 18" wide x 17½" high x 144" long Distance between shelves app. 4"

ALLIED SALES
237 MILL ST., CINCINNATI 3, OHIO



## Accessory Registers Coin Count for Drink Vendors

NEW YORK CITY—An electromechanical recording device internally installed in coin vending machines, which, for the first time, automatically registers a continuous, printed coin count against drinks and products dispensed, has been announced by the Chalex Corp., 295 Madison Ave. here.

Introduced at the International

Coca-Cola convention in Atlantic City, it was pointed out that the Recorder simplifies the vending machine distributor's outlet refund problems, records "jackpots," and registers the tests of salesmen and mechanics with a printed record substantiating their reports. In addition, a continuous permanent, legibly printed record is provided for accounting and other departments.

Claims made for the Recorder is that it increases efficiency by reducing vending machine loading time, eliminating the necessity for coin counting at the vending machine, and by doing away with the need for route salesmen to submit reports in longhand. No ink or ink-ribbons are required for the Sales Audit Recorder, and up to 10 legible copies can be made if desired.

Over-all dimensions are  $7\frac{1}{4} \times 4\frac{7}{8} \times 2\frac{1}{2}$  in. It can be easily installed inside most present cup or bottle coin coolers.

The unit is made by the Durant Mfg. Co., maker of precision counting devices for 70 years. The Chalex Corp. has world-wide sales rights.

## Recirculating Pump Works In Extra-Shallow Sumps

PHOENIX, Ariz. — The Palmer Mfg. Corp. has introduced a new recirculating pump and kit called the "Oasis."



Specifically designed for large and small evaporative coolers, the Palmer pump has incorporated new features. Among these are the patented shallow pan baffle plates which enable the Oasis to give efficient pumping action in sump depths as shallow as 1½ in.

Use of the pump in conjunction with evaporative cooling will provide extensive savings to individuals and communities through conservation of power and water, it is claimed. The pump recirculates all available water over and over again.

# Get on the Gravy Train



Sunroc Dealers and distributors are clicking along on the Main Line to Profits, make no mistake about *that*.

Sunroc is America's foremost independent manufacturer of water coolers . . . has won first place by a combination of integrity, quality in its highly specialized products, and aggressive merchandising and advertising unparalleled in water cooler history. So well established is Sunroc's reputation that many Sunroc Coolers are sold today, sight unseen, from advertisements.

This isn't accidental. Buyers in all of Sunroc's vast and varied markets *know* that the Sunroc line—the only comprehensive line of water coolers in America—embraces just the models they need. They have confidence in Sunroc dependability... in the advanced engineering that's years ahead.

Above all, they appreciate the fact that this pacemaker for the water cooler industry passes on to the customer the savings from volume production, in the form of prices as much as 20 percent below competitive models.

The Sunroc Gravy Train is going places, coast to coast. If you board it now, you travel on the momentum of unchallenged prestige . . . the finest line at the lowest prices . . . an advertising schedule twice as big as that of Sunroc's nearest competitor and with infinitely more merchandising behind it.

That coupon below . . . you'd better send it today.

America's most complete line of water coolers, \$199.95 up, F. O. B. Glen Riddle, Pa.



SUNROC SUPER COOLER

Nothing like it on the market. Combination water cooler and refrigerator. Three ice-cube trays; ample refrigerated storage space; unfailing source of properly chilled drinking water. Now available in pressure or gravity type.



SUNROC JUNIOR ECONOMY COOLER

The industry's lowestpriced nationally advertised pressure cooler. Capacity 5 gallons per hour. Ideal for smaller offices and establishments of all kinds.

WATER COOLERS

GLEN RIDDLE, PA.

OFFICES IN PRINCIPAL CITIES

Distributors throughout America and in 30 Foreign Countries
"SUNROC SERVES THE WORLD...a Cool Drink of Water"

SUNROC REFRIGERATION COMPANY GLEN RIDDLE, PA.

Please send me, without obligation, complete information about the Sunroc line and Sunroc's personalized sales service for 

Dealers

Distributors. (Check which)

Company

Address

7.0

Zone

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Address to Mr.

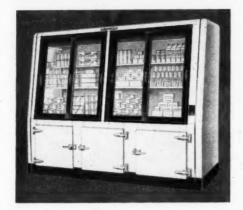
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## Pinnacle

#### DAIRY . BEVERAGE . VEGETABLE Refrigerators

#### **FEATURES**

- Frame constructed of dry No. lumber securely fastened together with screws.
- Insulated with verminproof Fiberglas insulation.
- Entire cabinet covered with waterproof paper.
- Exterior top, back bottom covered with aluminum or other rust resistant metal.
- Front and ends finished in two-coat gleaming porcelain.



#### Quality Construction Throughout!

Interior finished in porcelain and Stainless Steel. Exceptionally large doors that slide easily at the touch of your fingers. Extra storage compartment at bottom. Fluorescent lights in display section.

A few exclusive Pinnacl territory Paranchises are still available. Whe or immediately for

FREE FOLDERS of complete line.



Again it's

GOVERNAIR

completely packaged air-conditioner

(U. S. Patent No. 2,297,928)

with evaporative condenser

## TELLING and SELLING

A GUIDE TO SMART ADVERTISING AND MERCHANDISING PRACTICES

This series of articles comprising ideas and principles for the small retail or manufacturing business is written by James D. Woolf, who was for more than 20 years a vice president and director of J. Walter Thompson Co., one of the largest advertising agencies. Out of his experience embracing all types of advertising and merchandising he brings his counsel to the small businessman who must plan his own advertising and promotional efforts.

#### By James D. Woolf

#### The Idea That Built Field's

Marshall Field, the founder of the great store that bears his name, spent as little time as possible at his desk. Every day he would wander up and down the aisles of the store studying the crowds. Often he would eavesdrop on talk between customers and salespeople.

In this way he learned what kind of sales appeals made people buy. When they bought, he wanted to know what it was about the merchandise that appealed to them.

One day he overheard a woman complain about an item she had bought the day before, and the salesgirl was arguing with her. As the customer was about to march out of the store in anger, Mr. Field stepped up and bowed to her.

"Excuse me, madam," he said. "I am Marshall Field. If your purchase doesn't please you, I'll be happy to return your money. In this store the customer is always right. That is our policy."

It has been said that Mr. Field invented that policy on the spot, and that he was the first merchant in

Chicago to put it into effect.

#### GIVE 'EM WHAT THEY WANT

One of John Jacob Astor's first investments as a young man was in a mortgage on a millinery store. Finally he had to take possession of the store in a sort of partnership with the man who had been running

Mr. Astor spent very little time inside the store. It is related that he sat on a bench outside and watched the women go by. He studied their bonnets. When he saw one that looked especially good on its wearer, and it was apparent she was very proud of it, he would rush into his store, describe the bonnet he had just



like it and put into the window.

He did not have a hat on display but what some woman liked it before he made it up. Soon the formerly bankrupt store was a great success.

#### WATCH CHANGING TRENDS

On my desk I have an interesting little pamphlet, "The THINKER-UPPER," which describes itself as "a weekly bulletin devoted to the power of ideas-and how to produce them."

"No business man, complacent, can coast along sleepily on old ideas. Said Elbert Hubbard: 'Ideas are born; they have their infancy, their youth-their time of stress struggle-they succeed; they grow senile, they nod, they sleep, they

Advertising that is coasting along sleepily on old ideas is bound to be ineffectual. Millions have been wasted that way. Millions are

never changes. Maybe not. But people change in their ideas, their viewpoints, their problems, their needs. Man continues to evolve. Trends in living are changing con-

One of the most important essentials in writing advertising is that of keeping abreast of the times. In every community we see old businesses fading out because their owners are not in step with current ideas. They no longer understand human wants, no longer are sensitive to the fads and vogues and viewpoints that come and go in the

#### WHAT IS AN ADVERTISING IDEA?

There is a great deal of confusion about advertising ideas—and where

A good advertising idea is a good

One of America's largest advertising agencies requires that its young copywriters serve an apprenticeship, over a period of several

agency tells its beginners. "You must know what makes them do the things they do, what they like, what they don't like. You must know what appeals make them reach into their pocketbooks, what ones leave them cold. Learn about the yens and the yearnings, the hankerings and the deep-down human desires that motivate people, and then-and not until then—are you ready to write copy that sells."

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It was such an understanding that enabled the late E. M. Statler to build his great hotel chain. As a bellboy he studied guests, list ned



to and remembered their complaints. He observed, for example, that most guests hated to pass out tips when a pitcher of ice water was brought to their rooms.

Years later, Mr. Statler built his first hotel in Buffalo. He ran filtered ice water into every room. The filters and pumps, as well as miles of pipes to the rooms, cost him so much money he nearly went broke. Other hotel men said he was crazy to spend so much on a little thing like ice water.

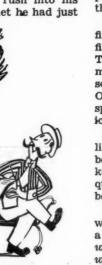
But this original idea and scores like it—a free morning paper at your bedroom door, a tiny light over the keyhole on the door, rubber heels for quiet on the shoes of maids and bellboys—built the great Statler system.

During those years when Statler was growing big, people said he was a smart advertiser. He was. But what made his advertising smart were the smart ideas in his business.

Mr. Statler understood the wants of hotel patrons, and he believed in giving them what they wanted and not what he thought they ought to

During the war years, when purses were full of money and shelves were empty of merchandise, salesmanship took a holiday. Advertising as a selling force also went on a vacation. Millions and millions of dollars were largely wasted on foolish and purposeless campaigns.

No longer can merchants ignore the great incontrovertible principle that no advertising can sell merchandise profitably unless it is aimed squarely and skillfully at a human need.



seen, and order one made up just

## One paragraph seizes my interest with special force: wasted now.

It has been said that human nature stantly.

shifting picture.

they come from.

business idea. We often forget that. And good business ideas are to be found only in the wants of people. You succeed or you fail to the degree that you understand needs.

months, behind retail counters.

"You must know people,"

## JORDON IMMEDIATE DELIVER Model SC 37 illustrated: 37 cu. it. White Hi-Baked enamel finish stainless steel interior. Available with heavy duty ice-maker or blower coil. Other sizes in wi or polished stainless steel fram 20 cu. ft. Standard and 2 tem-

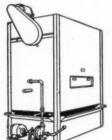
## AMERICA'S MODERN COMPLETE BINE JORDON REFRIGERATOR CO.

perature models.

Factory and Sales Division 58th ST. and GRAYS AVE. PHILADELPHIA 43, PA.

CABLE: "JORDONREF" BElgrade 6-4510

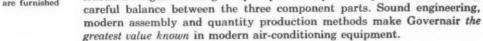




EVAPORATIVE CONDENSERS... An ecoical means for the condensing of refrigerant gases, Freon, Methyl-Chloride or ammonia. This one unit replaces remote water wasting cooling towers, excess piping and water lifting pumps. Water consumption is reduced to a fraction of that required by water cooled condensers where water is wasted



FLOOR TYPE UNIT COOLERS... Designed for use in cold storage rooms to produce any temperature required. Water defrosting appa-ratus may be furnished for units used in rooms with temperatures below 33 degrees. Air ducts and diffusers shown are furnished on special order.



Ready to operate

Rapid delivery



BLAST COILS FOR HEATING AND COOLING Made of copper tubes and copper fins All joints are securely welded into suction headers on the return side and fed counter-flow from the expansion valves. This assures a tight system with minimum loss of refrigerant. Thorough pressure test made at factory.



WRITE OR WIRE FOR DESCRIPTIVE LITERATURE AND PRICES

Make only simple electrical, water and duct connections

Here is the only really complete packaged air-conditioner on the market

offering compact, efficient operation, easy installation and high quality

performance. Its outstanding feature, of course, is the built-in Evaporative

Condenser which reduces water consumption and cuts water costs to a

fraction. Higher cooling output per horsepower input is obtained by

Wide range of sizes (3 tons to 50 tons)

GOVERNAIR CORPORATION-513 N. BLACKWELDER-OKLAHOMA CITY, OKLA.

PIONEERS IN THE MANUFACTURE OF COMPLETELY PACKAGED AIR-CONDITIONERS

#### Commercial Distributors Told Group Action Helps Promote Wise Business Operation

LITTLE ROCK, Ark.—A picture of average" commercial refrigerdistributor and the benefits he ator ceive from membership in the can al Commercial Refrigerator Nati Association were outlined here Sale ly by William C. Bader, presirece: of the association. dent

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the most part, the average ator of commercial refrigerdistr quipment is a local businessator' buying his equipment from man manufacturer and selling it to the ultimate end-user," he stated. "Naturally the distributor has

many duties to perform. He needs to carry a stock of merchandise, an adequate supply of parts, and to have trained mechanics employed to deliver and install the equipment he sells. He must render a certain service to the manufacturer to represent him properly in the territory.

"He needs to pay for the equipment he purchases on time and the manner in which he conducts his business will tend to establish both the manufacturer's and his own reputation in that particular trade territory.

#### GOODWILL ROLE CITED

"If he does a good job, makes correct installations, takes proper care of the engineering required, renders satisfactory and proper service to his customers, and delivers the articles the customer needs to do business, he builds up his own name and reputation and goodwill for the manufacturer.

"To do these things," Bader pointed out, "the refrigeration distributor must be a good businessman. He must operate on sound business principles; he should possess a certain amount of local credit experience to see that the equipment he sells is financed on proper terms so that the end-user can and will pay for it.

"And he must serve his customer by installing the equipment so it will operate properly and at the minimum amount of expense."

Bader asserted that many distributors carry a variety of kindred lines and offer special services. Among these are store planning and engineering work.

"If you don't do store planning or engineering work," he said, "it might be well for you to give that phase of business considerable study. Assist the customer in properly planning his store so that he can do a better selling job at less cost. If you do so, you have made a steady customer and will continually sell him new equipment.

#### UNFAIR METHODS RESULT

Turning to the benefits offered by the NCRSA, Bader declared, "Because distributors of commercial refrigeration have not until recently had a trade association, they have, in many cases, resorted to unfair trade practices between themselves. These include price cutting and other types of degrading practices.

"In most cases, these practices have not been necessary but have been instituted merely because many distributors do not yet realize the business handicap in such a method of operation.

"Many of us through the war and later years have had some sort of local committee, association, or group with which we have been affiliated. These local associations and groups have attempted to correct some of the evils in the commercial refrigerafor industry.

"We have found, too, that when we do get together, the man down the street, who is also a human being just like ourselves, isn't such a bad fellow after all. From past experience we have found that he is just as anxious as the next fellow to climinate the evils that have hindered distributors and local businessmen.

WHOLESALE ONLY

"It is for this reason that NCRSA was established," he noted, "in an effort to correct these conditions within the industry."

Pointing out that it takes well over \$800 per month to keep the association's Minneapolis headquarters running, including printing, postage, telephone, and executive secretary's salary, Bader said, "By retaining our present membership (300) and increasing it to say an additional 200 this year, we will be able to accomplish a great many things that will be of the utmost benefit to members."

The first of these, he stated, would be a joint meeting with officials of the Commercial Refrigerator Manufacturers Association to get cooperation from manufacturers so that they "can get the best representation in the territories in which their products are sold."

He expressed the hope that an educational program for distributors could be set up with the cooperation of the manufacturers. "It is imperative that each distributor know what it costs him to do business and how much profit he needs to stay in business," he declared.

#### TO MEET OTHER GROUPS

Additional meetings with other industrial groups, such as the Refrigeration Equipment Manufacturers Association, the Refrigeration Equipment Wholesalers Association, the National Association of Refrigeration Contractors, and the Refrigeration Service Engineers Society, are anticipated, Bader said.

"We want to establish friendly relations with all other groups in this industry interested in cooperating for the correction of unfair trade practices to improve business conditions and relations generally.

"If you establish your business on honesty, integrity, and fair dealings," Bader concluded, "you will build up a fine business that will continue to grow and yield better profits in the years to come.

"If you do that you will become a substantial citizen of your community. The manufacturers are interested in that type of distributor."

#### Locker Plant Uses Green Covers on Frozen Food Cases

KANSAS CITY, Kan.-Instead of the aseptic all-white showroom appearance usually associated with locker plants, the Fairway Food Locker plant here, operated by Harry Betz, has covered a series of six frozen food cabinets in the showroom with bright apple-green linoleum, set off with strips of rich black.

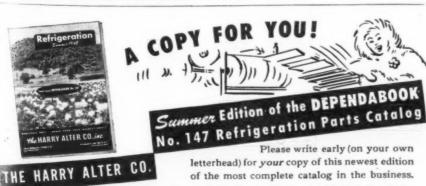
The result is a highly unusual appearance, and a neater, eye-appealing showroom, says Betz.

#### Firm Cuts Locker Prices, Ups Commissions In Bid for Sales

SIOUX CITY, Iowa - In an attempt to further the sale of locker plants, the Frosty Foods Equipment Co. here has announced lower prices on its lockers and an extension of salesmen's discounts to 25% and 5% on orders of any quantity.

These prices are subject to change depending on steel costs, James O. Harvey of the company added.

The new prices affect both Frosty Foods compartments and drawers. All orders are subject to prices prevailing at date of shipment, Harvey



of the most complete catalog in the business. 1728 S. MICHIGAN AVE., CHICAGO 16, ILL.

134 LaFayette St., New York 13, N. Y.

## MORNING MILK - COOLED FOR DELIVERY

Agitated milk bathes against cold surfaces of cans refrigerated by agitated water.

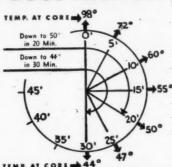
Atlanta 1, Georgia

ICE BANK 4 SIDES MILK CIRCULATION WATER CIRCULATION

Just Fill the Cans... **WOGGLE-SCRUB** does the rest

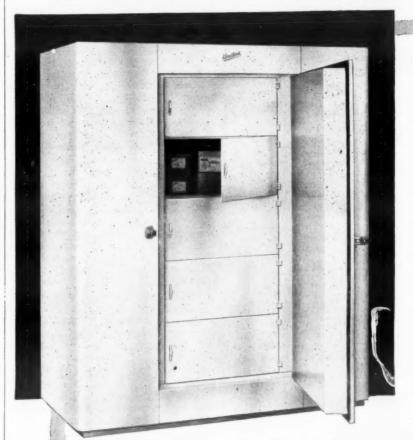
AT LAST! Dairymen don't have to do any night and morning milk; (2) wait hours for it to cool; or (3) hold it over. . . They don't have to stir it, or periodically remove the can-covers (hence a lower bacteria count). . NOW, thanks to WOGGLE-SCRUB, they just fill the cans, set the fully-automatic control, and go about their other chores while WOGGLE-SCRUB brings the morning-milk's temperature down to 44 degrees in 30 minutes. (See temperature-drop chart at the right.)

If you aren't profiting from those time- and labor-saving advantages, investigate WOGGLE-SCRUB.
There's no other Milk Cooler like it—not one with its exclusive features.
... Wire or write today for complete details. tures. . . . Wire complete details.



Accommodates 6 ten-gallon cans or 9 five-gallon cans, or combinations of both. DEALERS
Investigate the profit possibilities of this entirely different Milk Cooler. . . .
There's nothing else like it. . . Dairymen need it. . . .
Wire or write for details. . . .
What territory could you cover? WOGGLE-SCRUB TAID MITE SOOF49 Circulating Milk Cooler WOGGLE-SCRUB THE WARREN COOLER CORPORATION

RESTAURANTS · CAFES · HOTELS · HOSPITALS · INSTITUTIONS · SCHOOL AND PLANT LUNCH ROOMS · GROCERIES · CONFECTIONERIES · MEAT MARKETS · FARMS · HOMES



manufactured by

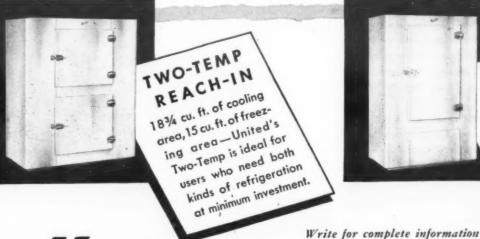
P. O. Box 873 8

## Here's why they like UNITED FREEZERS

- ★ Upright design gives easy access, requires less floor space.
- \* Freezing area divided into compartments with individual doors to cut cold loss, permit storage according to type.
- ★ Dependable United construction gives economical, trouble-free service, longer life.
- \* Available in 3 practical sizes to fit individual needs-16 cu. ft.; 30 cu. ft.; Two-Temp with 15 cu. ft. of freezing area.

#### 30 CU. FT. UPRIGHT FREEZER

Heavy gauge, lacquer-finished aluminum exterior, polished aluminum interior. Five 6 cu. ft. compartments. Heavy, approved insulation throughout. Thermostat control maintains constant 0° F. temperature.





16 CU. FT. UPRIGHT United's 16 cu. ft. upright freezer, divided into 4 compartments, is self-contained, ready to plug in and use. Heavy gauge aluminum, approved insulation.



REFRIGERATOR COMPANY

350 ROBERT STREET

ST. PAUL 1, MINN.

BOTTLE COOLERS . REACH-INS . WALK-INS . ICE CUBE MAKERS . BEVERAGE DISPENSERS

#### **Bendix Washers To Be Turned Out In Canada**

SOUTH BEND, Ind. - Formation of a Canadian subsidiary to manufacture Bendix automatic washers was announced by Judson S. Sayre, president of Bendix Home Appliances, Inc., and of Bendix Home Appliances, Canada, Ltd.

W. J. Reuscher has been elected secretary-treasurer and Harlow K. Lyons vice president and general manager of the subsidiary.

The Canadian company has contracted with Canadian Assemblies, Ltd., of Amherst Nova Scotia, for the fabrication and assembly of the automatic washers. With production scheduled to begin in a few weeks, the annual output is expected to reach 30,000 units.

Bendix automatic washers will be produced not only for distribution in Canada but in a number of foreign markets, Sayre disclosed. Canadian Assemblies, Ltd., also will fabricate replacement parts.

Between 750 and 1,000 persons will be employed by this new Canadian industry. The retail value of the machine to be produced will amount to approximately \$9,000,000 annually.

Reuscher is vice president and treasurer of the parent company, while Lyons is director of exports.

Canadian Assemblies, Ltd., of which W. S. A. Daley is managing director, eventually will employ some 200 men and women. In addition, parts for the machines will be manufactured at Trenton Industries, Ltd., Trenton; Enamel & Heating Products, Ltd., Sackville; and a number of other

2 New Models

THE WARWICK



Planning To Step Up Output In England



Long range plans to steadily increase Kelvinator manufacturing schedules at Crewe, England, are drafted by executives at conference in Detroit. Left to right are A. E. Carter, director, Kelvinator, Ltd.; R. A. DeVlieg, vice president in charge of manufacturing, Nash-Kelvinator Corp.; H. A. Lewis, vice president, Nash-Kelvinator, who directs all export and foreign operations of the corporation; and Carl J. Barbee, general manager, Kelvinator, Ltd. DeVlieg and Lewis also are directors of Kelvinator, Ltd.

plants in Nova Scotia, New Brunswick, Ontario, and Quebec.

Within six months after operations start, washers will have 70% Canadian content. Initially, component parts will be shipped from the U.S.

THE

BARCLAY

The new STAIN-LESS Refrigerated

with the new

amazing KOL-

STREAM Diffuser

Coil. 36" High with 6" Back

Splash, 24" deep.

No. 2204..4'-0" long, 2 doors No. 2206..6'-0" long, 3 doors No. 2208..8'-0" long, 4 doors

#### **U.S.** Can Stop Soviet By **Balancing Trade—Haddon**

CLEVELAND—The United States can stop the Russian steamroller by taking action to guarantee that it will not sell more than it buys.

The recent Cleveland World Trade Conference was so advised by W. C. Haddon, representative of Westing-Electric International Co. Haddon is also chairman of the World Trade Council of the Pittsburgh Chamber of Commerce.

"If we expect to put the brakes on Communism," Haddon told the conference, "we must put aside the political book and look at the world's balance sheet. For here is the root of the trouble which is causing people abroad to lose faith, to know doubt, uncertainty, and fear, and to close their eyes when their freedom is stolen."

He said Italy and France have monthly trading deficits with the U. S. of about \$45 to \$55 million and about \$120 million respectively. Mexico and all of South America are also going into the red on dollars and even Canada, "our best customer," is beginning to suffer from a serious dollar shortage, it was pointed out.

"This threatens both our exports and our standard of living," Haddon declared. "And it puts another psychological and economic weapon into the hands of the men from the Kremlin.

"We have played directly into the hands of Russia by our striking demonstration of overselling in the flush of our postwar enthusiasm. We have made dollars disappear from the markets of the world by failing to replenish them with our purchases. 'Trading veterans claim we are following an old path in the history of unbalanced trade—the path that led to depression and a second world war, and which can easily lead to a third. For when the world runs out of dollars, it follows the lines of least resistance."

Haddon then referred to what he calls "the Battle of the Gap—the struggle to bridge the disparity between our exports and imports."

"This gap is represented by exports of more than \$14 billion in 1947 against imports of about \$5.5 billion," he continued. ". . . If we intend to avert another world war we must learn to balance our trade.

#### OUR BIGGEST JOB

"I do not mean that we should be unprepared or leave ourselves open for attack. But I feel that our announced intention to balance our trade would be a declaration of peace. Uncertainty and mistrust would have to stand aside for freer trade—the soundest and most lasting foundation for peace.

"Of all the jobs facing the U.S., the biggest is to get the world on a paying basis."

Haddon criticized the suggestion of some that the gap between U.S. exports and imports be closed by scaling down exports on the basis that they contribute only about 10% to the national income.

"But how big is 10%?" he asked. "For many companies foreign trade means as high as 30% of their business, represents thousands of jobs."

Furthermore, he stressed, the U.S. must keep its exports high as an effective way of combating Communism.

"Any indecision, disunity, or internal disintegration on this subject has an exhilarating effect on the whole Communist movement," he said. "At each suggestion that we are about to reread the myth of our self-sufficiency, or retreat into our shell of isolation, a thrill of hope and excitement goes through the Communist world.

"For Communism today is existing not so much on its own accomplishments as it is on the hope of an economic collapse in the U.S. and a corresponding collapse in western Europe.'

Haddon denied that there is any contradiction between promoting the sale of American products in the world and the general advancement of the world. He said two examples of this are activities being conducted by Westinghouse.

#### WITH BOTH FEET

"One of these," he explained, "is an Import Department which puts Westinghouse into foreign trade with both feet because it has been exporting through its International company for more than a quarter of a century. This venture . . . is a logical outgrowth of Westinghouse export operations since the underlying motive is to assist other countries in securing the dollars necessary for purchases in the United States.

"Another example of idealism and realism being combined in business is the way Westinghouse is assisting other countries to industrialize by selling them know-how in the form of design and manufacturing information.

#### **Weber Appoints Havas To Direct Export Sales**

LOS ANGELES-Paul J. Havas, who has been active in the export field for more than 15 years, was recently appointed



For the last 11 years, Havas was associated Montgomery Ward & Co. in Chicago as staff executive in the export department. His ac.

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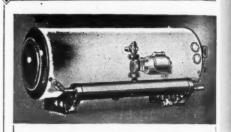
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tivities included supervision of sales, merchandising, and sales promotion, and he also served as assistant man.

#### Philco Acquires Interest In International Corp.

PHILADELPHIA-Philco Corp. is acquiring the minority interest in Philco International Corp., which has heretofore handled sales of Philco products outside the U.S., John Ballantyne, Philco president, announced.

Ballantyne said Philco will issue a net total of 7,120 shares of its authorized and unissued common stock in effecting the transaction, according to Ballantyne. He said Philco is now represented by 150 foreign distributors and about 7,500 dealers in 100 countries.



#### INDUSTRIAL **COOLERS**

High suction pressure water coolers ideal for bakery ingredient water and jacket cooling, film processing, bottling plants, etc. Variable ranges of sizes. Low suction pressure for remote installations and cabinet type coolers also available.



# UNLIMITED SALES POSSIBILITIES

WOKLING

#### WITH THIS 2-WAY BEVERAGE DISPENSING

Two drinks from the same draft arm -a perfectly mixed carbonated beverage or clear sparkling soda water—and as easy as drawing a glass of water.

It's the newest and fastest growing thing in bar and soda fountain equip ment. It speeds over-the-counter service, it saves time, it eliminates bottles, it's more sanitary than other service methods and it makes more money for your

For you, the distributor or dealer, add these sales advantages and then compare with any other type of dispensing equipment.

- · Select-Flo is a permanent type installation that requires only the space occupied by the draft arm itself. It is not to be confused with makeshift and often unsanitary dispensers that take up valuable working and service space
- It is not a gravity flo system but pressure fed—accurately controlling the proportion of syrup and soda water for the finest drinks.
- Select-Flo equipment is all precision

built and factory tested. It carries a one year manufacturer's guarantee.

- All parts are immediately available for shipment
- Select-Flo draft arms can be installed in any convenient location and more than one draft arm can be operated on
- It is adaptable to already existing equipment such as coolers, carbonators and CO2 tanks.
- Select-Flo provides a liberal margin of profit for both dealers and distributors.

#### **GET THE FACTS NOW!**

Many excellent territories are still available. Complete information will be sent on request.

THE WOOSTER BRASS CO. WOOSTER, OHIO

> BEVERAGE DISPENSING SIMPLIFIED

TRUMPET SELECT-FLO SYSTEMS

WAYNE C. SMITH Midwestern Factory Representative CHICAGO, 45, ILLINOIS 7442 NORTH SEELY AVE.



Factory: 272 New St., Newark 4, N. J.

MI tchell 2-0500

Rittenhouse 6-4482

Sales Office: 224

North Thirteenth St., Philadelphia, Pa.

#### Proper Equipment, Layout, and Operating Methods For a Successful Locker Plant Business Outlined

TE COLLEGE, Pa. - Recomtions on the proper equipment ethods to be employed in order ain good locker plant layout peration were presented here il by J. William Paul of the agton Ice Co. of Washington,

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Co.,

aking at the annual frozen food ence sponsored by Pennsylvania conf college, Paul covered proper insulation, refrigeration, chilling, and room layout, locker room layand freezing, wrapping, and

His talk, edited slightly, follows: Locker plants represent what might

be called heavy duty refrigeration facilities. Not only are temperatures low but your (the locker operator) responsibilities for a continuing operation are great. Insulation should have all of the following properties:

Low thermal conductivity High moisture resistance High fire resistance and not readily support combustion

Structural strength and freedom from settling Vermin and rodent resistance

Odorless and non-odor absorbing Reasonable cost

Long life and not subject to decay Record of proven satisfaction

#### Good Installation of **Good Insulation Needed**

Since any insulation is only as efficient as the manner in which it is installed, time proven specifications and experienced erection crews are a necessity. Thorough vapor sealing on the warm side is a must in locker plant design no matter what insulation is selected.

An increase of at least 1 in. of ceiling insulation should be used where the ceiling becomes a roof. In single storied buildings having false ceiling, adequate ventilation of the attic space will lead to reduced operating costs and trouble-free

Electrical conduits should be brought into the locker room through the wall in which the door is set and the leads distributed within the room on the under side of the ceiling insulation to frostproof fixtures.

This method of wiring avoids the

necessity of numerous openings through the insulation which impair efficiency. It also eliminates breakage of light bulbs that occurs when lines are dropped through the ceiling permitting warm air and moisture to enter the globe and form ice on the

Hangers for refrigerating coils and tracking should be carried from a structure within the room. Hangers secured above the ceiling permit infiltration of heat through punctured insulation.

Moisture and ice collect around the hangers with resulting breakdown of the insulation and loss of refrigeration. Vibration in the tracking and coils enlarges the punctures, causing

The interior finish should be hard, smooth, and dense. Ceilings should be flat and beams as widely spaced as possible to avoid pockets of poor circulation. Both contribute to moisture formation resulting in harmful frost in freezers and mold and fungus development in the higher temperature rooms.

Sodium hypochlorite or chlorinated paints should receive consideration in the chill and aging room. The sterile-lamp not only aids in processing but is most helpful on this

Extra pains should be taken to see that the concrete wearing floor in the locker room is poured true and level. If this is not done, you will experience some real headaches when setting up the steel locker sections, especially the latest acceptable sec-

The heavy weight in the lockers often binds doors and drawers when the section is out of plumb. Hinges have been broken, locks jammed and broken, and even drawer guides and

Floors in chill and aging rooms, curing rooms, and processing rooms should be sloped at least 1 in. in 10 ft. Locate all drains for insulated areas below the level of the concrete subfloor for accessibility. If drains are located above this point, it is necessary to tunnel them through the insulation, causing unnecessary

puncturing and loss of efficiency. Drains from toilets should be separate from those of refrigerated rooms and processing room. All drains should be no less than 4 in., well vented, and have deep-seal traps.

Where plumbing codes prohibit drains in refrigerated areas, the finished floors should be sloped to drain at the doors with sweep-outs set so as to provide fall to open trapped drains. In the case of common floor levels requiring angle-iron sill cold storage doors, drains must be installed in pits.

Locker rooms and freezer bulk storages are growing larger each year. Where the floor distance from the center of the rooms to the nearest outside wall exceeds 10 to 12 ft., consideration should be given to ground freezing, even though good course fill and exterior drainage is provided.

Install either 6 in. vitrified sewer tile on 6 ft. centers in the fill just below the sub-slab, or a tunnel 6 sq. ft. in cross-section on approximately 15 ft. centers. In either case, these should run the short way, be freely vented, and screened at both ends.

Irrespective of whether high or low pressure refrigerating systems are selected a two-compressor installation of the same make seems desirable. One should be on the low temperature side and the other on the high temperature side and in all cases, be cross connected.

In addition to having capacity as outlined later, good design should call for a daily operating characteristic of

not over 15-16 hours under full load on the basis of usual operating conditions.

#### **Evaporator Surface Must** Be Adequate

There is little choice between convection (forced air) or conduction (plates or coils) as evaporators. The main consideration should be for adequate evaporating surface to hold a temperature split which at the chance of becoming controversial with the experts, we outline as follows:

1. Chill and Aging Room-Hold temperatures not higher than 38° with a split of 10-15° on conduction systems with 5-10° on convection systems.

2. Sharp Freezer-Produce continuous operating temperatures of 20-25° below zero with a 10° split on conduction systems and 10-15° below zero with a 5° split on convection systems, especially the high air velocity tunnel type. The system should also be capable of handling and freezing 5 lbs. of product per locker per day on just over a 10 hour complete freeze basis.

3. Locker Room-Hold temperatures of not over 0° F. with a 10° split on conduction systems and 5° split on convection systems.

Approximately 25% of the area of the chill and aging room should be devoted to chilling and be separated from the aging room by a noninsulated movable partition.

The track height should be held at a minimum of 7 ft. 2 in. and preferably 8 ft. 2 in. It should be supported on a rigid structure within the room capable of carrying loads of 300 lbs. per sq. ft. on each rail.

A minimum of 30 in. should be

allowed between rails and at least 24 in. from walls or any projections. The tracking should be rigidly suspended and braced on 30 in. centers and be rustproof, including all switches.

The most efficient and economical layout for tracking is to install the main header rail in front of each room with run-off or branch rails leads to dead ends in the rear.

#### Chill Room Capacity-5 Lbs. per Locker per Day

Greater storage capacity with more division for separating different types and cuts of meat is provided by this method than by the continuous loop

The total chill and aging room area should allow from .6 to 1.0 sq. ft. per locker and have a capacity to chill at least 5 lbs. per locker per day.

In the locker room lockers should be strong and of an attractive design. In a walk-in plant, they should preferably be six high to secure the increased 20% revenue. They should be of the two-drawer type and allowance made for an aisle space of at least 36 in. Lockers should be held 2-3 in. from all walls.

Consideration should be given for bulk or larger storage for commercial and institutional users.

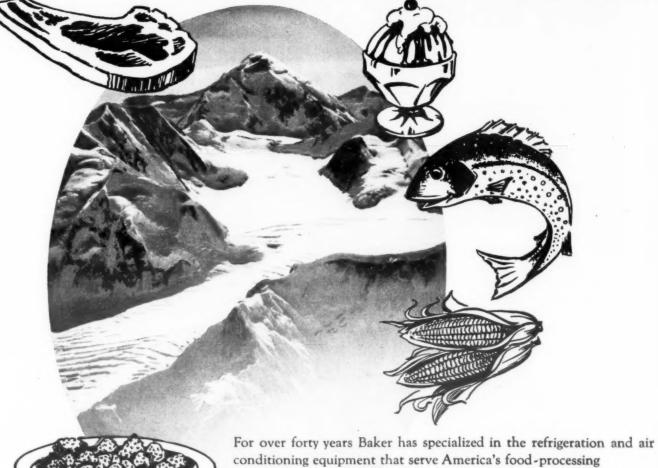
Optimum aging time is 6-8 days. With good paper folded and tightly wrapped to drive out the air, a year's storage time seems to be long enough for beef and six months for pork.

Trimming out protuding bones which puncture the wrapping paper helps. Pork quick dipped in a high quality lard at about 212° F. offers a real improvement.

If proper blanching technique is carried out, fruits and vegetables, if prime, need little further attention.

## They took a trip

to "Baker Land" to reach Main St., U.S.A.



conditioning equipment that serve America's food-processing industries. Today, under the magic fingers of Baker controlled cold, billions of pounds of food each year are protected on their often months-long trip to the nation's tables. In Baker's broad line you'll find a wide range of top-quality equipment for both Freon and Ammonia applications. In Baker's expert engineering, you'll find the knowledge to plan top-performance installations. Through Baker's nation-wide network of branch offices and expert distributors, you'll receive prompt service - in plans, installations, and maintenance. Consult Baker before you buy.

Zone balanced . Engineered

FACTORIES AT OMAHA, NEBRASKA AND SOUTH WINDHAM, MAINE . . . HEADQUARTERS, SOUTH WINDHAM, MAINE

Baker Ice Machine Co., Inc., South Windham, Maine.



#### Paint Is Important Factor

further damage.

tional designs.

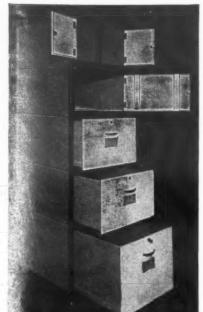
rollers made non-operative.

## **Profits and Economy** Call for MASTER

Look over Master anywhere and you'll realize how much better Refrigerated Lockers can be. You'll appreciate their sturdy construction and finish—their flexibility of installation, etc.

Once you do this you won't be satisfied with any lockers but the

#### MASTER FOOD CONSERVATORS



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1015

The "Choice of the Industry." You get more for your money and build satisfied patrons. If you want the lockers that satisfy - demand MASTER.

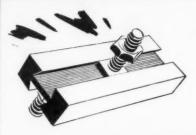
#### Immediate or Later Delivery?

You set the pace! Specify if drawers are to be shipped assembled or knockdown, also if snap or barrel type locks are desired. Do it NOW.

> Endorsed by and sold through distributors of refrigeration and insulation.

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Member of Frozen Food Locker Institute, organized for your protection.



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Install that motor; it fits the base-any base. No drilling or filing. No holes out of line. No rotor shaft too long or too short. Carry motors and adapters in every service car.



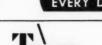
Manufactured and distributed by

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TODAY AND EVERY DAY

## Double Feature!



THAWZONE, the moving

dehydrant, circulates and searches out moisture, destroying it chemically. For new and reconditioned units, as well as



TRACE is a highly effective refrigerant leak detector. Its stable, red color reveals leaks promptly in old or new



## Offices In East, South

PHILADELPHIA — Hajoca Corp. has added two new links in its distribution centers for refrigeration supplies and parts, reports H. E. Tippett, manager of the refrigeration

The Columbus, Ga., branch opened a new refrigeration department May T. E. McCollough is manager of the branch which serves the western Georgia and eastern Alabama areas.

In New Jersey Hajoca opened another wholesale refrigeration distribution center in its Camden branch, 1687 Haddon Ave., on June 2. T. H. Krayer, manager of the branch is in charge of the department. He will be aided by J. E. Stevenson as sales representative.

#### Data on Freezing Eggs Given In Pamphlet

NEW YORK CITY-The practical aspects of freezing eggs for storage are discussed by Dr. M. E. Pennington, in the latest Application Data (AD 29-R) to be published by The American Society of Refrigerating Engineers.

The eight-page brochure contains information on raw material standards, sanitary control, control of composition, general manufacturing conditions, freezing of liquid eggs, holding freezer, and transportation.

The author was a pioneer in the handling of perishable products under refrigeration.

Copies may be obtained from ASRE headquarters, 40 West 40th St., New York, for 35 cents each.

#### Hajoca Corp. Opens New Baker Keeps Extra Danish Pastry Dough Stored In Walk-In 'Bank' To Meet Rush

ST. LOUIS-An outstanding bakery which never runs short of fine Danish pastry is the Lake Forest Pastry Shop here.

Located on a main highway leading into St. Louis' wealthier residential district, Lake Forest Bakery has always featured Danish pastries heavily, and has built up an outstanding demand for them.

However, due to the fluctuation in the number of customers served daily, there were frequent periods in which insufficient Danish pastry had been baked or an oversupply was left on hand.

Due to inclement weather which varies so often in the Mississippi River Valley, the high amount of moisture prevalent in the area rapidly destroys the freshness of baked products when left in the open longer than 12 hours.

Through the use of a large specialpurpose, walk-in freezing cabinet designed by Karl Bollenmueller, owner of the bakery in collaboration with the St. Louis Butchers' Supply house, which specializes in freezing cabinets and retarding dough boxes, they are now able to meet the rising and falling demand by using several dough retarding cabinets in conjunction with this special walk-in freezing cabinet.

The solution developed is a 12 x 8 x 8-ft. walk-in freezing cabinet in the basement of the Lake Forest Pastry Shop, which operates as a "bank" holding large amounts of Danish pastry doughs, pie crusts, and cookies in reserve to be baked according to the demand. All ingredients, including jellies, jams, flavorings, and doughs are frozen in the same room at either 0° or 10° tem-

The freezing cabinet is of the walkin type with cork insulation. Walls, ceiling, and floor are covered with white ceramic tile. All unbaked products except Danish pastry doughs are frozen on tiers of Kold-Hold freezing plates, which form the refrigerated plate shelving around the walls of the room. "Contact temperature" where the trays of ingredients actually touch the plates is -10° F.

Danish pastry doughs, on the other hand, are frozen in standard 18 x 26-in. baker's trays; 60 trays at a time may be accommodated in two racks built in next to the Kold-Hold plates. Refrigeration is thus applied to the dough only by air circulation, a practice developed by Bollenmueller after much experimentation.

Doughs frozen this way, he has found, freeze with a smooth, even texture without ice crystals or "soft spots" which might be caused

through contact refrigeration. Maximum storage for doughs and baked goods in boxes is about 8 to 10 days in which time it retains the same freshness as any freshly made dough, as a matter of fact, this quality improves due to freezing of mois-

Danish pastry ingredients are nade up whenever there is slack time for that purpose, and resultant "banks" of doughs and ingredients are always available for the peak periods of the

From the "bank" the doughs are brought to room temperature in two stages. First, the doughs are placed in regular dough retarding cabinets where the actual thawing out process slowly takes place.

After reaching box temperature of 35° to 40° the dough is then handled the same way as any other retarded dough.

This way the baker can either load his retarder direct from the produc-tion department or from the "bank."

As a general rule the production department loads the retarder and places the overflow in the "bank" to be used whenever they cannot meet the immediate demand or when production equipment is tied up with other bakery items. Due to systematic plotting of the demand over a yearly period, Lake Forest Pastry Shop is thus able to produce large volumes at the right time without undergoing heavy pressure.

Refrigeration for the freezer is provided by a 3-hp. aircooled Carrier unit, which gives a -20° suction temperature and 0° air temperature in the boxes.

The compressor is large enough to handle this cabinet, the retarded dough cabinets, and the refrigerated display cabinets.

Baked angel rings and jelly roll sheets are made up during slack periods and held frozen until needed; normally three or four days. They are brought to room temperature the same way the doughs are handled by placing in retarding cabinet first to slowly thaw them out.

## Profits Not Prophets **Foretell Your Future in Dry Bottle Cooler Competition**

You don't have to be a crystal-gazer to find out where you stand in dry bottle cooler competition. But you ought to evaluate your competitive position-present and future.

When the supply was short, all bottle coolers sold well. But is that true today? And will it apply to a future where supply is plentiful and competition is sharp?

If the line is Master-Bilt — yes. For Master-Bilt was designed for choosy buyers. It combines features and advantages that give you power to sell against any competition—at a profit.

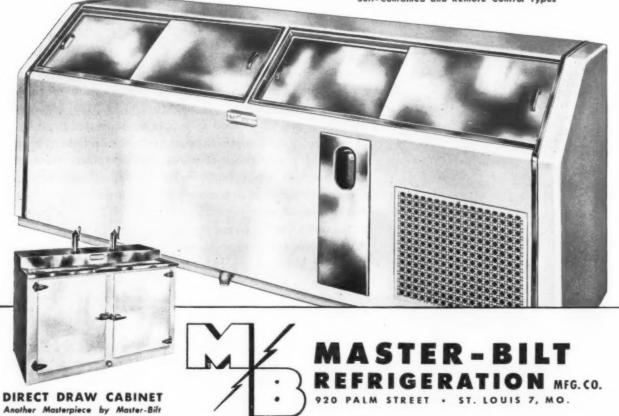
What are some of its strong points? Efficient cooling is one. Each and every bottle has direct contact with the coils, is evenly and individually chilled. Gravity cooling is employed—a system which requires no fan.

Master-Bilt convenience is another salesstimulating feature. The handy sliding lids and unique storage arrangement permit easier brand separation and speedier dispensing. Master-Bilt cabinets hold 4 to 8 more cases of beer than other coolers with comparable overall dimensions.

Still another great talking point is Master-Bilt's masterful construction: its sturdy cabinet . . . stainless steel doors and track . . . sagless bottom . . . thick walls of Fiberglas insulation. You find built-to-last quality in every visible and hidden detail.

These are the things that make Master-Bilt a name to watch in refrigeration. And they'll make you the one to watch in dry bottle cooler competition. Wouldn't you like that security? If so, write now - today - for information. A few choice territories are still open.

MASTER-BILT DRY BOTTLE COOLERS Self-Contained and Remote Control Types





Where a quality product demands the finest of

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## Engineering Approach To the Use of Fans

By G. H. Koch, Electric Appliance Engineering Department, Westinghouse Electric Corp.

Just when we need relaxation after a strenuous summer day in hot offices and factories, we find the walls and ceilings and the air of our homes at their peak temperatures. Unless a large volume of cooling outdoor air can be drawn through the rooms, little relief can be expected until after midnight.

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The needs of a large group of families who cannot afford complete air conditioning have long been met by scores of manufacturers who produced high-output window exhaust fans designed to be placed either in or directly in front of a window opening. By manipulating the other door and window openings in the house or apartment, outdoor air could be drawn in through other rooms where the maximum cooling was desired.

The designer of the typical attic fan was relatively unrestricted. His unit could be of almost any practical size or shape, and employ large diameter fan blades, belt-driven at a low rotative speed, to provide a high air output with a minimum of noise. There was little need for styling and absolute quiet.

The designer of the large window exhaust fan had no such freedom. He had to provide a high exhaust capacity with a small blade rotating at a moderate speed. The maximum blade diameter was determined by the smallest popular window opening and the rotative speed was limited by the permissible noise. A compromise between the exhaust capacity, size, and noise considerations usually resulted in less than the desired output at too high a noise level, while the size still remainded too great to fit many window openings.

The design of the new Westinghouse "Mobilaire" fan started with the realization that it would be almost impossible to overcome the obstacles facing the window fan designer without breaking away from the exhaust fan tradition, which places the fan blade in the plane of the exhaust opening. One significant fact uncovered during tests in the laboratory and in the field was the application of the old principle of a jet injector. B. G. Smith of Texas A & M College found that a fan placed from two to four feet from the window opening exhausts from 50 to 100% more air than when it is in the plane of the opening.

This revelation gave real point to the design of the Mobilaire fan, which was proceeding as a portable, adjustable height pedestal model. With wheels for complete mobility and with an extreme range of adjustability for height, the Mobilaire fan was suited to take advantage of this discovery. It could be adjusted to center in any window opening and could be easily moved to any location. Its mobility made it available as an all-purpose circulating fan during the day, so that doors and windows could be closed to keep out the summer heat.

In the early development stages, it was decided that the Mobilaire should have a blade diameter no

#### Height Is Adjustable

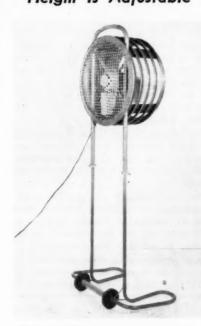


Fig. 2—This Westinghouse "Mobilaire" fan can be adjusted to accommodate various height window sills. It is shown here at the maximum height of 37 in. but can be collapsed to a minimum of 15 in.

greater than 16 in. so that it could be used with a small window opening and would demand minimum space. Running at a maximum of 1050 r.p.m., a commercial fan using such a small blade could be made to operate quietly, but it would not provide an exhaust capacity of more than 900 c.f.m.

The first step to increase the volume of air that could be moved was to make sure of the new recommended position described in Fig. 1. With only this change in position, however, a good commercial 16 in. fan could provide only 1,700 c.f.m. air movement when exhausting under ideal conditions. It was found possible to increase this figure to a maximum of 2,400 c.f.m. by stepping up the blade pitch and the power of the motor without increasing the motor speed.

Finally a unique development in the Mobilaire fan raised its air moving capacity to 3,000 c.f.m.—the use of a series of overlapping deflecting rings. It is well known that by far the greatest volume of air delivered by a free-air fan approaches the blade radially. Unless this air is deflected into the axial direction before it reaches the blade, the axial air is crowded into a smaller stream diameter of higher velocity. This capacitor motor running at 1050 r.p.m. on high and at 650 on low speed switch position.

#### The 'New Look' In Positioning of Fans

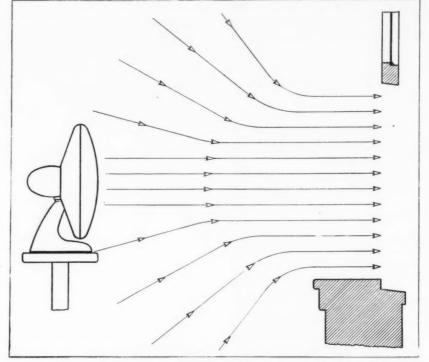


Fig. 1—New recommended position for fans. A 16-in. desk fan is placed a distance of about 3 ft. from the window. For best results the dimensions of the window opening in both the horizontal and vertical directions should be slightly larger than the diameter of the fan blade.

type of performance may be admirable for a high penetration circulator, but is definitely unsuitable for a fan used to blow air to the outside.

By deflecting the radial air into an axial direction, the rings actually become propelling surfaces, prevent crowding of the air stream, and provide a path for a larger volume at reduced velocity. This is an ideal performance characteristic for an exhaust type fan. It is also a favorable characteristic for a large circulating type fan in a home where a large air blast at high velocity would be annoying.

Weighing 35 pounds, the complete unit is equipped with a six pole  ${\bf v}$ 

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Rome Water Cooled Condenser Coils insure trouble-free condensing equipment. Used by leading compressor manufacturers

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Have All These New and Finer Features

NEW CHEVROLET 4-SPEED SYNCHRO-MESH TRUCK TRANSMISSION

A special feature in heavy-duty models that assures new operating ease and efficiency.

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A feature that offers new clear floor area, safety and efficiency in models with 3-speed transmissions.

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power shift in 2-speed axle at
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Soda, cola, and ginger ale from one faucet.

 No discoloration of drinks.

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Six seconds for 8 ounces.

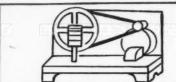
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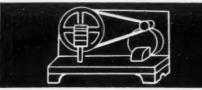
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#### **Specifications** That Spell S-A-L-E-S!

- COMPACT. 27" high, 22" wide, 10" deep
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- FILTERS AND DEHU-MIDIFIES. Fiberglass filters
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- MOVABILITY, Com pressor-to-unit copper tubing is easy to in-stall, easy to move. Apartments or hotels can of-fer CHOICE of air condition-ing. Lessees can install and later move unit without losing equity.

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INTERNATIONAL—the most modern air conditioning system on the market—has a lower initial cost and installs for 25% to 40% less! No expensive alterations of walls, ceilings or masonry . . . operates any-where in the room. These are BIG selling points! As efficient as it is attractive (finished in walnut grain, blond mahogany or white porcelain),
INTERNATIONAL cools and dehumidifies from any location in a
home, office, hospital, tourist court, hotel. The compressor (extra) can in attic. h closet, connects to the unit by an easily installed, inexpensive copper tube. Movable, fully automatic, triple thermostatic control. Increased compressor capacity makes large commercial sales easy. Order your stock NOW.

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This item is NEW! WRITE or WIRE for franchise territories, terms and quantity discounts.

Remember,

INTERNATIONAL fits ANYWHERE.

Stock INTERNATIONAL now . . . for greater sales and profits in Modern Air Conditioning.

Manufactured by

INTERNATIONAL MFG. CO. 515 WEST MAIN ST. OKLAHOMA CITY, OKLA

One of a series from by James J. LaSalvia

#### Air Cleaning Devices (Cont.)

ELECTRIC AIR CLEANERS

The electric air cleaners manufactured by Westinghouse Electric Corp. are very effective as air cleaning devices, and the acceptance in the air conditioning field has been a success.

This electric air cleaner is known under the trade-ranked name of "Precipitron," and the cleaning effi-ciency of air is rated very high, above the mechanical type filter.

It should be pointed out, however, that Westinghouse is not the only manufacturer of electrostatic air cleaning equipment. The operating principles of all makes, though, are basically the same as the following description of the Westinghouse

The Precipitron operates on a principle entirely different from an ordinary air filter. It consists of three major parts-the dust collector cell, the ionizing unit (Fig. 9), and the power pack (Fig. 8).

The ionizers are supplied by the power pack with 13,000 volts d.c., creating a strong electrostatic field. As the air passes through this static field, every particle of foreign matter, regardless of size or makeup, receives a positive charge.

Within the area of the cell itself (known as the collector) are parallel plates alternately charged with 6,000 volts d.c. and spaced 5/16 in. apart. Since unlike charges attract, the positively charged dust particles are attracted to the negative plate and grounded. Fig. 10 illustrates this principle.

The cell itself is composed of two duplicate sets of high voltage and ground plates, mounted between two load-bearing end plates laced together by steel bars, angles, and channels to form a rigid structure.

The power pack is employed to

Source of Power

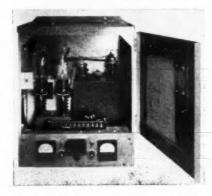


Fig. 8-This power pack develops 13,000 volts d.c. to supply the electrical energy for the Westinghouse Precipitron.

change the a.c. supply to d.c. of suitable voltage to charge the ionizers and collector plates. It furnishes approximate 6 kv. (6,090 volts) d.c. to the plate circuit of collector cells and 13 kv. (13,000 volts) d.c. to the ionizer circuit.

Pulled out of the air and deposited on these collector cells, all dirt remains within the collector chamber until flushed harmlessly down the

The cleaning of the plates is accomplished by washing with a hose. It is necessary to provide drains on both sides of the Precipitron in the casing, to permit this drainage.

One of the main features of this electric air cleaner is that it will remove soot and smoke which no meIonizing Unit

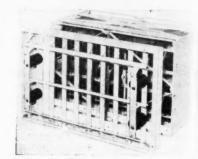


Fig. 9-The ionizing unit gives a positive electrical charge to each foreign particle in the air that passes through the unit.

chanical air cleaning device can accomplish.

This type of air cleaning d vice also uses a thin film of adhesive on the plates to improve the adhesion of the particles to the plates.

The cells are installed in a forced air stream and sealed so that all air must pass through them. The cells are stacked vertically one upon the other, and in the number required for the desired volume of air to be cleaned. (See Fig. 11.) This cutaway view of a typical casing layout shows the Precipitron as the clean ing component of an air condition-

(To Be Continued)

#### Principle of Electric Air Cleaner Operation

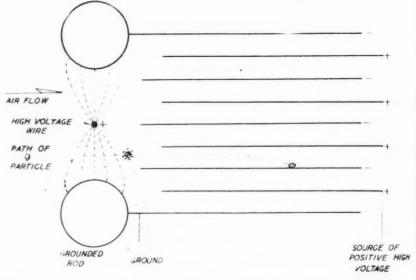


Fig. 10 diagrammatically shows how the positive-charged particles are attracted to the negative collector plates and are thus removed from the air stream.

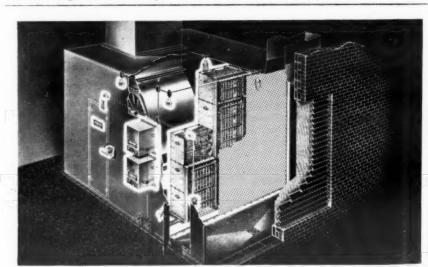


Fig. 11 is a cutaway view of a typical large Precipitron installation.

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When you have a big compressor installation . . . or any job involving the starting of a heavy flywheel load . . . specify an Allen-Bradley Bulletin 640 (Manual) or Bulletin 740 (Automatic) compression resistance starter. These starters will accelerate the motor from standstill to full speed with velvet smoothness. They are easy on belts, chains, and gears, because machines are started without a jerk. Send for Bulletins 640-740. Allen-Bradley Co., 1313 S. First St., Milwaukee 4, Wis.



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# New Style of Water-Saving Condensers

This drawing shows the air flow through the evaporative condensers now being made by Refrigeration Engineering, Inc. of Los Angeles. Air is applied to the condenser assembly under pressure by a blower which is outside of the moist air stream. Dry air is drawn into the fan and forced down a duct and then through the coil and expelled.

#### **New Evaporative Condenser Line Offers** A Number of Innovations In Design

LOS ANGELES-The new line of "Dri-Fan" evaporative condensers now being produced by Refrigeration Engineering, Inc., in capacities from 5 to 100 tons includes a number of design and construction innovations aimed at certain problems peculiar to

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and scroll free from moisture-laden air and is thus claimed to eliminate the corrosive effect on the fan

underside of the coils, which result in a "mushrooming" effect so that the air is distributed evenly.

Another innovation in the new line of "Recold" evaporative condensers is the "water bleed" method used.

An evaporative condenser evaporates about 1.8 gal. of water per hour per ton of refrigeration. The minerals that were originally in the water remain after evaporation, and thus with continued operation minerals concentrate in the sump tank.

To avoid excessive concentration of the minerals it is necessary to drain off or "bleed" a small amount of water in excess of the amount which is evaporated. In some cases this has been done with a "bleed" line from the water supply line.

In the "Dri-Fan" model this "bleeding" is accomplished by an "engineered funnel" arrangement. The top of the over-flow tube in the bottom of the evaporative condenser is enlarged in the form of a funnel. The diameter of this funnel is selected for each size condenser to catch just the right amount of spray water and divert it to the drain. Amount thus diverted is .9 gal. per hour per ton.

Some innovations in construction were necessary because the design changes put the coil and spray chamber under pressure. A means of construction was developed that sealed the corners and eliminated use of screwholes and sealing compounds and yet permitted easy disassembly of the cabinet for cleaning or servicing. This construction is marked by the use of ball corner pieces, and a reversed corner angle iron. Fastener clips are welded to the center and bottom of this corner angle iron.

This construction gives the corner binder strip and the ball corner a binding action.

WATER GALLON FOR GALLON...YOUR BEST BUY! For Cafeteria use . . . stainless steel cabinet models in all sizes. For Industrial use . . . variety of models for temperatures down to 34° Several choice areas available for manufacturers' representatives. FILTRINE MANUFACTURING CO. 53 Lexington Ave. Brooklyn 5, N.

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Your refrigeration parts and supply house in Central New York and Northern Pennsylvania

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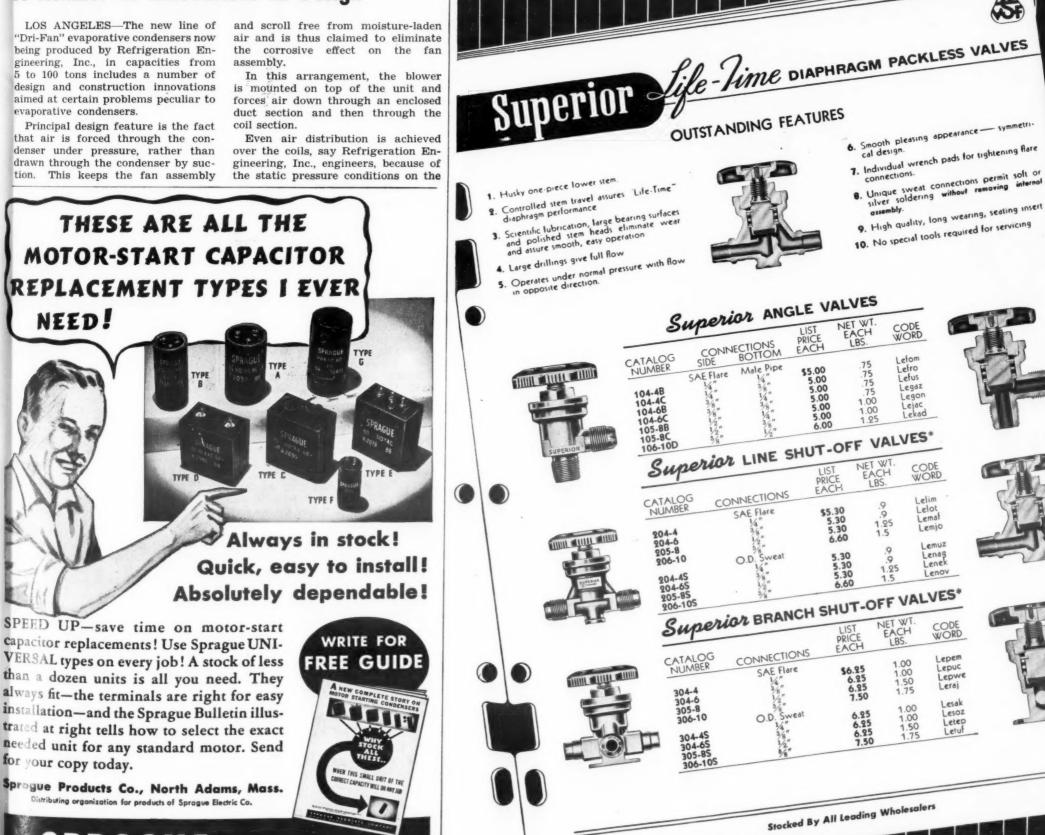
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#### Refrigeration Problems

#### **And Their Solution**

By P. B. Reed

For Service and Installation Engineers



Manager, Refrigeration and Air Conditioning Division, Perfex Corp.

#### **How To Use** Refrigerant Tables (3)

Columns 8, 9, and 10 in Table 1 show the amount of heat in the liquid and saturated vapor of ammonia at the temperatures shown in Column 1. Some tables show only two of these columns, for the values shown in Column 9, the Heat Content of the saturated vapor, are obtained by adding Column 8 and 10; that is, the heat of the liquid plus the latent heat is the heat of the vapor. The Heat Content of the vapor, as shown in Column 9, is sometimes called the "Total Heat."

Some tables use a rather new term "Enthalpy" instead of the expression "Heat Content"; but the meaning and the values are the same.

#### HEAT CONTENT OF THE LIQUID

To aid in fully explaining how the values in these three columns are used, let us again refer to the 5° temperature, (the evaporator temperature on which a Standard ton is based). We find the value 48.3 B.t.u./lb. in Column 8, the Heat Content of the liquid ammonia. This represents the sensible heat that is in liquid ammonia at a temperature

This does not mean that if 48.3 B.t.u. were removed from a pound of 5° F. liquid ammonia, it would contain no sensible heat and would consequently go down to absolute zero in temperature. It means that the  $5^{\circ}$  liquid has 48.3 B.t.u./lb. more heat than a cold liquid (but not at absolute zero) at some selected temperature base.

Some temperature base had to be established, so instead of basing it on absolute zero, -40° was selected, and most tables use -40° as the base for heat content of the liquid.

#### MOST TABLES BASED ON -40°

The base of -40° was selected because the two temperature scales, Fahrenheit and Centigrade, cross at -40°. That is, -40° Fahrenheit is also -40° Centigrade. Also -40° was about as low an evaporator temperature as was commonly encountered when the U. S. table was originally compiled.

So in column 8 it is assumed, for convenience, that at -40° there is no sensible heat in the liquid ammonia, so the value is shown in this column

for -40° as 0.0 B.t.u./lb. To warm the -40° liquid to 5° requires the addition of 48.3 B.t.u. per pound. To requires 138.9 warm it to 86° B.t.u./lb., etc.

Thus to warm a pound of liquid from  $5^{\circ}$  to  $86^{\circ}$  requires the addition of 90.6 B.t.u. for 138.9 — 48.3 = 90.6 B.t.u. Conversely, to cool one pound of liquid ammonia from 86° to 5°, we would have to remove 90.6 B.t.u.

Nor would the 90.6 B.t.u./lb. be any different if these values were based on 0° or -60°; that is, if zero heat content were assumed at any other temperature than -40°; for 90.6 B.t.u./lb. is the difference in heat content of liquid ammonia between  $86^{\circ}$  and  $5^{\circ}$ , and the difference would be the same, whatever the

In fact, in some tables, the heat of liquid is based on some temperature other than -40°. Many of the tables for the hydrocarbon refrigerants, such as propane, butane, etc., use 0° F. as the base temperature for the values of the Heat Content of the

It will be noticed that the values in Column 8 for temperatures below -40° are negative. This would seem to mean that at -50° for example, a

(2) (3)
Pressure
Abs. Gauge
Lbs/in² ibs/in² (3) (4) (5) Volume Liquid Vapor ft<sup>3</sup>/lb ft<sup>3</sup>/lb Vapor Ib/ft<sup>3</sup> 0.02278 .02282 .02286 .02291 .02295 .02299 .02304 .02308 .02313 44.73 42.05 39.56 37.24 35.09 33.08 31.20 29.45 27.82 26.29 24.86 43.90 43.82 43.74 43.65 43.57 43.50 43.41 43.33 43.25 43.16 43.08 -21.2 -19.1 -17.0 -14.8 -12.7 -10.6 - 8.5 - 6.4 - 4.3 - 2.1 1.478 1.4713 1.4866 1.4866 1.456 1.4407 1.4446 1.4362 1.4202 1.4202 11.50 10.97 10.47 9.991 9.541 9.116 8.714 8.333 8.150 7.971 143.0 147.9 153.0 158.3 163.7 169.2 174.8 180.6 186.6 0.02653 2.089 2.021 1.955 1.892 1.831 1.772 1.716 1.661 1.609 1.559 37.69 37.59 37.48 37.38 37.27 37.16 37.05 36.95 36.84 36.73 .02661 .02668 .02675 .02684 .02691 .02699 .02707 .02715 496.7 494.7 492.6 490.6 488.5 486.4 484.3

TABLE 1-SATURATED AMMONIA

pound of liquid ammonia would have 10.6 B.t.u. less than none at all, which is of course impossible. It simply means that at -50°, one pound of liquid ammonia has 10.6 B.t.u. less heat than it has at -40°: For this reason the negative sign is used.

The amount of heat required to heat a pound of liquid ammonia from -50° to 86° would be the 10.6 B.t.u. that would be required to heat it from -50° to -40°, plus the 138.9 B.t.u. to heat it from 0° to 86°. Mathematically it would be the difference in heat content at the two temperatures or: 138.9 - (-10.6) or 138.9 + 10.6 =

149.5 B.t.u./lb.

#### EXAMPLE OF USE OF HEAT OF LIQUID VALUES

As one example of how the values in Column 8, Heat of Liquid are used, suppose that the liquid ammonia leaves the condenser at 86°, but before it gets to the expansion valve it passes through a heat exchanger that cools the liquid down to 50°.

The 86° liquid has a heat content, according to Column 8, of 138.9 B.t.u./lb. and the 50° liquid has 97.9 B.t.u./lb. (not shown in Table Thus the liquid ammonia in passing through the heat exchanger, has been cooled 36° and has lost:

138.9 - 97.9 = 41.0 B.t.u./lb.For a moment, let us skip over Column 9 and go to Column 10, headed Latent Heat (of vaporization). The values in this column are the number of B.t.u./lb. that must be given to liquid ammonia at the temperatures in Column 1 to cause it to "boil" and change to a vapor at the same temperature. Thus, there has been a change in the "state" or condition of the ammonia from a liquid to a vapor, but no change in temperature. It will be noticed that this takes a lot of heat. At the standard ton condition of a 5° evaporator, it takes 565.0 B.t.u. to just change a pound of the ammonia from a liquid at 5° to a vapor at 5° -no change in temperature.

This tremendous amount of heat is used up in breaking apart the molecules of the liquid to allow them the greater freedom they have as a vapor. This takes a great deal of energy. Heat is one form of energy.

Since the latent heat of vaporization is required when the liquid vaporizes, the ammonia simply absorbs this much heat from anything nearby and in contact with it, and in so doing cools it, or as we say, "produces refrigeration."

We must remember, however, that the values given in Column 10, the Latent Heat, are the B.t.u./lb. that cause the liquid to change to a (saturated) vapor, at the same temperature as the liquid.

This means, that in the evaporator. when the ammonia changes from a liquid at 5° to a vapor at 5°, 565 B.t.u./lb. of refrigeration is produced; that is, 565 B.t.u. are absorbed by each pound of 5° liquid to change it to 5° vapor.

But, how did the liquid get to be 5°? It was at 86° in the condenser, and in the liquid line just before it went through the expansion

#### HOW NET REFRIGERATING EFFECT IS DETERMINED

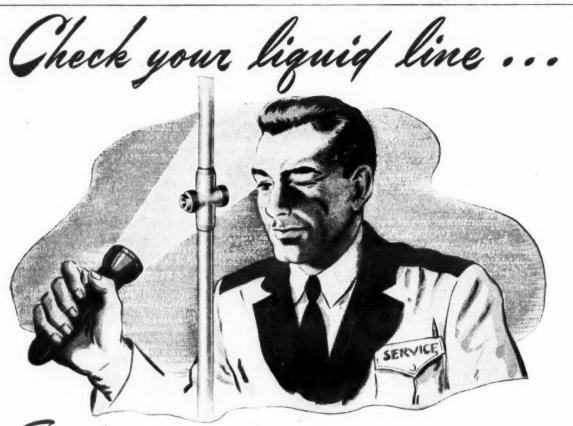
When it went into the evaporator, the 86° liquid has to be cooled to 5°, and we find by going back to Column 8, Heat of Liquid, that to cool the liquid from 86° to 5° requires the removal of:

> 138.9 - 48.3 = 90.6 B.t.u./lb(Where 138.9 is the heat of liquid at 86° and 48.3 is the heat of liquid at 5°.)

The total amount of cooling that one pound of the liquid can do at 5 is 565 B.t.u., for that is its latent heat. However, 90.6 B.t.u./lb. of this 565 B.t.u./lb. cooling effect must be used up in cooling the warm 86 liquid down to a  $5^{\circ}$  liquid. This leaves only 565.0 - 90.6 = 474.4B.t.u./lb. as usable refrigeration, or as it is usually called, the Net Refrigerating Effect.

Thus the Net Refrigerating Effect is the Latent Heat in B.t.u./lb. less the difference between the Heat Content of the liquid at the temperature of the liquid in the evaporator and as it goes into the expansion valve (or float valve as capillary tube).

(To Be Continued)



OUBLE PORT LIQUID INDICATOR

BUBBLES WILL THE LIQUID

The improved design of our liquid indicators is effective assurance against refrigerant leakage around the sight glass. The sight glass is sealed into the forged brass body by a heavy Neoprene gasket which, in turn, is compressed by a packing gland, which forces the pliable gasket along the sides of the glass and produces a perfect seal.

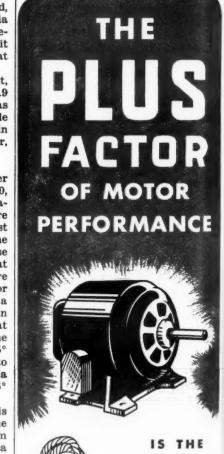


**Double Port** Liquid Indicator

Mueller Brass Co. Liquid Indicators are made in a complete range of styles and sizes. The seal cap type may be installed where light conditions are favorable. Where the light is poor, we recommend the use of our double port liquid indicators illustrated here. By flashing a light through one port, the exact condition of the refrigerant may be determined through the other port.

The new design of the compression gland permits the use of standard wrenches for tightening.

MUELLER BRASS CO. PORT HURON, MICHIGAN



A motor is just as efficient as its brushes. Often an excellent motor is put into operation equipped with brushes selected for general use. However, atmospheric conditions, temperature and overloading impede efficiency and performance. Our engineers will gladly make the proper recommendations to increase motor efficiency with the use of the proper brushes. Look to "Ohio" for good performance in the Motor and Generator Brush Field.

OR MOTOR

Send for Our Reference Book in your category:—Industrial, General Purpose, Mining, Welding, Refrigeration, Appliances, Transportation, Carbon Specialties.



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LOS Tank ing co tower ordina offices Tulsa.

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dampers control the supply to four

coil supplies winter heat and a spray

type humidifier adds humidity.

In each Climate Changer, a steam

The refrigeration for this operation

includes a 25-ton reciprocating com-

pressor and a large Trane evapora-

tive condenser, which is located on

the roof. The evaporative condenser

is designed to handle 239,000 B.t.u.

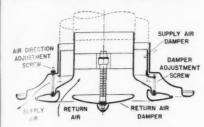
at 78° wet bulb, 105° condensing

temperature, and 40° suction.

through duct work.

private offices.

#### New Connor Diffuser



## Air Exhausts, Discharges Through Common Unit

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NEW YORK CITY—A recent addition to the Kno-Draft line of adjustable air diffusers made by W. B. Connor Engineering Corp. is intended for use where air is to be both discharged from and returned or exhausted through a common unit.

The supply air is discharged from between the outer and intermediate cones and the return or exhaust air is drawn through the center section of the diffuser. It is so designed that the supply air is ejected radically away from the return air opening which eliminates any short-circuiting of supply air into the return air opening.

supply air volume is controlled by a cylindrical, sliding, sleeve-type damper fitted snugly to the inside of the diffuser neck and connected by means of peripheral operating screws to the intermediate cone.

Turning these screws raises or lowers the damper. This alters the air outlet aperture between the lower rim of the damper and the flange of the intermediate cone of the unit uniformly around the periphery so as to vary the air delivery through the diffuser.

Varying the air direction is accomplished by raising or lowering the inner assembly. To reduce the downward discharge angle or produce a more horizontal direction of air discharge the inner assembly is lowered. To increase the downward discharge angle or produce a more vertical direction of air discharge, the inner assembly is raised. Movement of the inner assembly is controlled by the air direction adjustment screws.

The center cone constitutes the return air damper. It is rotated on a central operating screw, clockwise to close, counter clockwise to open the return air aperture.

## Kuehmsted Is Chief Engineer of Santa Fe Cooling Tower Div.

LOS ANGELES — The Santa Fe Tank & Tower Co. here has named A. M. Kuehmsted to head its expanding cooling tower division.

As chief engineer of the cooling tower division, Kuehmsted will coordinate the activities of the branch offices at San Francisco, Houston, Tulsa, and New York City.

Early last year Kuehmsted opened the New York office, but recently turned it over to Herbert Kunan in order to assume his new post.

#### **Bayer Relieves Headache**

#### Air Conditioning Units Solve Humidity, Heat Problems In Warehousing Aspirin

ATLANTA — Warehousing aspirin can be a headache, especially under the heat and humidity conditions prevalent here, the Bayer Co. division, Sterling Drug, Inc., has discovered.

But for this headache, Bayer officials didn't gulp down one of their products. They called in a couple of air conditioning contractors for fast acting relief.

To Refrigeration Appliances, Inc. here they gave the task of cooling the warehouse. And to Engineering Contractors, they assigned the heating and air conditioning of the office section of the building.

Problems facing Refrigeration Appliances were that high heat and low relative humidity can cause the aspirin to check, whereas high humidity might lead to tablet deterioration, possible absorption of moisture and odors, or discoloration. The packaging material, too, had to be kept from deteriorating and collecting mold.

Outside design conditions called for were 95° dry bulb and 78° wet bulb with a relative humidity of 47%.

#### SETUP FOR PACKAGING

The final design condition set up, considering proper storage conditions that were also satisfactory for packaging, was 75° dry bulb and 61° wet bulb with 43% relative humidity. Sensible load, rather than latent load, was considered the most important here.

Three Trane Climate Changers equipped with direct expansion coils were selected to handle the warehouse job. These filter a mixture of outside and recirculated air, cool it, and dehumidify it before delivering it through ducts to the desired areas.

A "Freon" compressor and two Trane evaporative condensers were also installed. The latter were placed inside the warehouse and handle a total of 158,300 B.t.u. at 78° wet bulb, 105° condensing temperature, and 45° suction. Because the latent load in this case is light, no reheat coils are used.

#### UNITS AID OFFICE COMFORT

In the offices, where human comfort received dominant consideration, Engineering Contractors installed two horizontal Trane Climate Changers to handle both summer and winter air conditioning.

These were placed in furred spaces in the ceiling. Each unit had its own plenum chamber for mixing return and outside air. The main thermostats controlling each unit were located just outside the return air grille in the plenum chamber.

Direct expansion coils cool the air which is delivered to the office areas

## REFRIGERATION AND AIR CONDITIONING UNITS . PARTS . TOOLS . SUPPLIES

#### Get Your New Airo Catalog 48A



More Pages . Many New Items More of the Lines You Want

Important New Lines Added Many Scarce Items Back Again

Send for Your Copy Today Write on Your Letterhead Wholesale Only

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NEW, and exclusively Ranco, the beryllium copper power element insures maximum sensitivity and positive action that permits temperature accuracy of plus or minus one degree. Designed and produced entirely by Ranco... precision built of the finest materials . . . thoroughly tested in hundreds of thousands of applications.

This latest Ranco development is in stock at your Ranco wholesaler. The beryllium copper power element is another exclusive Ranco feature that means greater customer satisfaction through longer life and more dependable operation. Ask your Ranco wholesaler to show you the complete Ranco line, every item a potential profit-maker for you.

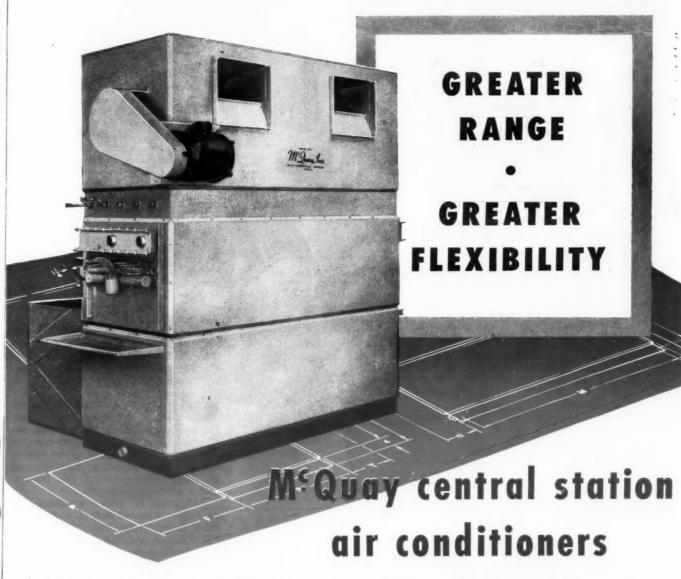
#### EHECK with Ranco FIRST

- Specialists in Refrigeration
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- Greater Customer
  Satisfaction
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World's Largest Manufacturers of REFRIGERATION CONTROLS

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NOW is The time to Cash in on the Big Room Air Conditioning Market...



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Genuine ROOM
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A Major Appliance that's Easy to Sell, Trouble-Free, and PACKED with PROFIT

It's easy to get into the profitable Room Air Conditioning business with the MITCHELL unit. Here's genuine 5-function Air Conditioning...cods, debumidifies, filters, circulates, ventilates! Powerful be ton hermetically-sealed refrigeration mechanism delivers 5780 BTU per hour (certified by U. S. Testing Co.)—nothing in the field comes close to this performance! Sell the MITCHELL unit like any major appliance package. We provide you with everything you need to know for easy estimating and simple installation. Fits any window; plugs in like a radio. You can sell successfully with the barest minimum of technical knowledge. Start earning big profits with the MITCHELL Room Air Conditioner NOW. Write for the full selling details today!

Air Conditioning Division

MITCHELL MANUFACTURING COMPANY

2529 N. Clybourn Ave., Chicago 14, III.

McQUAY research and engineering skill has produced something new in central air conditioning units—a unit which through increased range and flexibility brings better air conditioning efficiency to both the comfort and the process fields. With a capacity range (in eight models) of from 3 to 50 tons, McQuay's new units have been designed to promote ease of installation—maximum serviceability. Sectionalized construction includes com-

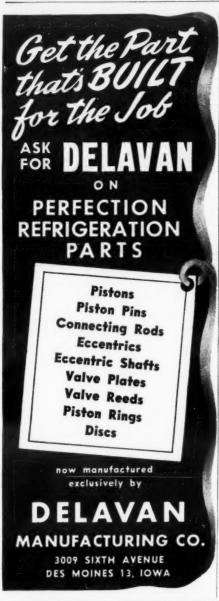
pletely removable panels for easy maintenance. All connections are exposed and conveniently grouped to simplify installation and servicing.

For universal year 'round air conditioning use, these units include Ripple-Fin coils, long famous for heat transfer efficiency. See the McQuay representative in your area, now, or write McQuay, Inc., 1607 Broadway Street Northeast, Minneapolis 13, Minnesota.

Mi Quay inc.

WART THE STATE OF TOWN

HEATING . AIR CONDITIONING . REFRIGERATION



CLEVELAND - Appointment of William T. Boyce as assistant advertising manager of The Weatherhead

Co. has been announced by Don Fairchilds, advertising and sales promotion man-

Boyce comes to Weatherhead from the American Steel & Wire Co., where he was first supervisor of advertising production and later assistant to the advertising

Wm. T. Boyce manager. He served in the Army and Air Corps during the War, being discharged from service as an Air Corps Captain.

#### Acme Industries Picks Agents For East, Midwest Regions

JACKSON, Mich.-J. T. Maloney, assistant sales manager, has announced the appointment of two new regional representatives for Acme Industries, Inc.

Coward-Eastman Co., 43 South 23rd St., Philadelphia, has been appointed to represent Acme in eastern Pennsylvania, southern New Jersey. and Delaware.

Paller Engineering Co., 1037 North Pennsylvania St., Indianapolis, was appointed the Acme representative for central Indiana.



SAVE THAT DOOR! Use THORS to help prevent sticking doors. An average freezer door's treatment with THORS costs about four dollars a year. That's mighty cheap, especially when you know how THORS helps save your doors, cuts down time loss and repairs.

> THORS is a clean, odorless, semi-solid product and will not affect most gasket materials. The first application of THORS should cover jamb and gasket thoroughly. One application lasts for weeks - all you have to do is brush off the light snow that forms around gasket leaks. You do not apply THORS again until after 5 or 6 brushings.

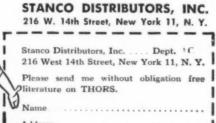
THORS is also recommended for the doors on refrigerator trucks.

Save money—cut down defrosting time by about two-thirds. Reduce labor costs by applying THORS on your refrigeration coils and plates. One application lasts for several defrostings.

THORS will not corrode black iron, alloy, steel and galvanized metal surfaces.

YOU CAN'T LOSE!

For further information mail coupon or consult your supply dealer.



#### Boyce Named Assistant Reconditioning, Reselling Operations Concentrated at One Weatherhood Ad Mgr. Spot Help Miami Dealer Realize 10-20% Profit on Trade-Ins

MIAMI, Fla. — An "open-air" ap- ❖ pliance reconditioning shop, equipped to handle from 8 to 10 complete refrigerator overhauls per week, is "solving the trade-in problem in advance" for A A Appliance, Radio & Refrigeration Co., 1261 S. W. 8th St. here.

The A A concern is 13 years old, starting out on a modest scale as a domestic refrigeration service organization, which gradually grew to cover all of Miami and suburbs 15 miles out in all directions, with a staff of six expert mechanics, and six "rolling shop" repair trucks.

Even during the war, when the draft took all but three of his men, owner Ed Stein was able to keep refrigerators operating for every customer who called in. As an example of the efficiency with which the firm was operated, its volume for all four war years amounted to approximately \$50,000 per year-represented entirely by \$3.50 per hour service calls.

Service experience during the war convinced Stein that with thousands of refrigerators wearing out each month, it would be a wise move to get into appliance retailing. Therefore, he took on a Kelvinator franchise for new appliance sales, and invested \$10,000 in the construction of a super-modern appliance showroom, with a 40-ft. all-glass front, built of flat blocks of colored stone which never required refinishing, and with exterior spotlights shining through the glass to illuminate refrigerators, ranges, and washing machines shown within.

While the showroom was building, Stein sent all six of his mechanics through a special Kelvinator-sponsored training program, whereby each learned the essentials of appliance selling, trade-in estimating, etc., in addition to hiring two outside salesmen and one showroom man to operate the new building.

Now, all six of the appliance salescrew cover their refrigeration service routes in the dual capacity of salesmen and mechanics—and each man has a long list of successful appliance sales to his credit.

Stein pays each man a flat 5% commission on every appliance sold; encourages them to run down leads themselves, to get into conversation with the housewife when repairing her present refrigerator, etc. Paychecks for \$150 a month and upwards are not unusual with this progressive Florida firm.

Service experience, a \$12,000 parts inventory, most of it concentrated in refrigeration parts, etc., has enabled Stein to settle the trade-in problem in advance. Anticipating the need for trade-ins in almost every future sale, with almost all refrigerators in the area from five to seven years old, the Miami dealer poured a concrete floor in the back of the A A Appliance, Radio & Refrigeration building, which was then roofed over to provide a capacious "outdoor shop." With two full-time shop mechanics

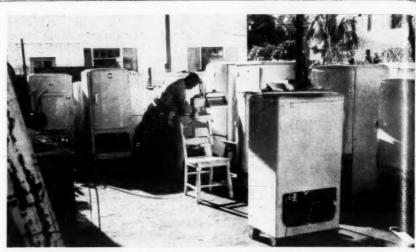
in attendance, the outdoor shop can accommodate 25 or 30 trade-in refrigerators at a time. Equipment in the novel shop includes a test-bench. machines for grinding, cutting, and polishing, high-pressure gas bottles, and a paint-spray booth.

Refrigerators under overhaul are placed on wheeled dollies, condensing units completely torn down, new parts added, etc., while the box itself steam-cleaned, new hardware added, and the exterior refinished, then 'sun-dried' out in back of the

Through concentrating all the operations of repair, repainting, and selling all at one point, Stein has been able to effect maximum economies in handling trade-ins-and he can sell the majority of the volume at between \$65 and \$95, showing a 10% to 20% profit on each.

Every trade-in, after recondition-





A A Appliances clear 8 to 10 overhauls per week from this roofed-over open-air shop.



Part of the \$12,000 parts inventory carried by Ed Stein

ing, is sold from the outdoor shop only-limited-income customers being hustled around from the showroom to make a selection "out in the sunshine" from the stock on hand all of which have been given a 90-day guarantee.

Extremely "service-minded" Stein has laid out the left half of his showroom to emphasize the huge parts inventory, busy domestic refrigeration service department and the servplay bins, which separate the shop from the showroom, show refrigeraparts, including compressor tor parts, pulleys, flywheels, belts, trays, door hardware, gaskets. The \$12,000 parts inventory in the stockroom, neatly laid out on display shelving around the dispatchers desk, makes a good impression on customers who have been troubled with refrigerator breakdowns in past years.

ice shop to customers. Seventy dis-

FILLING ALL NEEDS The Cutler-Hammer Line of REFRIGERATION REPLACEMENT CONTROL This One Universal unit alone covers 60% of all needs.

4 degree external differential adjustment either side of normal cutout

9321N9

Adjustable Mounting Brackets Maximum Mounting Centers..... 4-3/16 Minimum Mounting Centers..... 2-3/16

Adjustable Cutout Feature—Differential can be increased 4 degrees by turning indi-cator in "Hi" direction and decreased 4 degrees by turning in "Lo" direction.

Adjustable Range—Turning screw clockvise lowers settings and counter-clockwise raises settings.

Operating knob can be adjusted to meet prious evaporator scale settings. New knob is ideal for varying shield thicknesses. Makes this control adaptable to wider range of single dial replacement jobs where overload is not required in unit.

The Cutler-Hammer line of Refrigeration Replacement Control will meet all the refrigeration serviceman's requirements. One Cutler-Hammer Control Unit alone . . . the Universal Replacement unit . . . will handle 60% of his needs. And where exact replacement control is needed, that item also will be found in the C-H Exact Replacement Control line . . . individually packed, clearly labelled, complete with dial plate, mounting screws, trim washers and full instructions for mounting and adjustment.

Behind this line are 50 years of control specialization and thorough knowled e of merchandising requirements. Thus, the line is recommended by outstanding religeration wholesalers from coast to coas and alert service organizations everywher use it to reduce investment in stock, to insure regular and rapid turnover, faster completion of the job, and greater all-round atisfaction. CUTLER-HAMMER, Inc., 1362 St. Paul Ave., Milwaukee 1, Wisconsi



DOMESTIC, SEMI-COMMERCIAL AND COMMERCIAL CONTROL

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\$35

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#### Koch Sales Manager

ns



WM. R. McSHANE

#### McShane Will Head --

(Concluded from Page 1, Column 2)
Bros. Construction Corp. Until he
went into the service in 1942, he was
in charge of distributor sales at Koch.
In the Armed Forces he was a
member of an Amphibian Tank Unit,
with service in the Leyte and
Okinawa campaigns. He was mustered out in early 1946 with the rank
of captain.

Upon his return to Koch, McShane took the purchasing agent position. James C. Owens, an assistant in the purchasing office, is the new Koch purchasing agent. Before coming to Koch in 1945, he spent more than 12 years with the Santa Fe Railroad and the Lone Star Cement Co.

## Wholesalers To Trim Manufacturers--at Golf

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CHICAGO — Tenth annual wholesalers-manufacturers golf tournament sponsored by the Central Refrigeration Wholesalers Association will be held at the Itasca Country Club, Itasca, Ill., on June 18, Gentry Russell, golf chairman for the association has announced.

A full day of golf, dinner, prizes, and entertainment is planned for the occasion, Russell said. Tickets are available from Russell at Refrigeration Supply Jobbers, 2511 N. Pulaski.



#### NEW EQUIPMENT FOR SALE

100 Copeland 1/4 H.P. Condensing Units SE590 less motor, \$35 each.

30 Prest-O-Matic Carbonators, \$35 each.

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#### ASRE Aiming for --

(Concluded from Page 1, Column 2) household engineering papers.

At a Domestic Engineering Conference held Tuesday afternoon under the direction of J. L. Knight of General Electric and George Iwashita of Seeger Refrigerator Co., some 75 household engineers formally voted to request the president and council of the society to continue such a technical session, and further that a sub-committee to the national program committee be named to handle the household end of the program.

President Cliff Holske told the conference that the society would most assuredly cooperate in this move, but that the problem of lining up papers that would interest members and qualify for publication in the society's magazine would be up to the household engineers.

Presentation of the technical papers at the Swampscott meeting was without incident, excepting that the previously announced final paper entitled "Effect of Refrigeration and Freezing on the Quality and Nutritive Values of Foods" by C. R. Fellers of the University of Massachusetts was not permitted to be given.

The author, it was explained, would not submit the paper for review in advance, so the ASRE canceled it.

As for official society business, it was announced that members had approved the proposed increase in annual dues. Rates for full members have been upped from \$15 to the new figure of \$18; associate members from \$10 to \$15; junior members from \$7.50 to \$10. Students membership dues remain at \$2.50.

Not approved by members was a second amendment which would have given the ASRE Council the right to establish dues. A close majority of members favored the change, but the balloting failed to reach the two-thirds majority required.

A feature of the meeting was the annual golf tournament, in which W. H. Miller turned in the lowest gross of 85. Low net was won by Art Bernthal with a 69.

In team play R. H. Brown and H. T. Thibault edged out Bernthal and Joe Dugan by 147 to 148.

Both the technical aspects and the entertainment features totaled up to a successful meeting, it was generally agreed, even though the sun didn't put in appearance until the last day.

Trips to nearby historic New England points were a major feature, including boat trips from Salem to the fishing center of Gloucester. The barn dance Monday night (to which the hotel contributed some barnyard animals for atmosphere) brought many out for square dances. Entertainment which preceded it was also very well received.

#### To Boost Export --

(Concluded from Page 1, Column 2) ports to the ERP countries are now small because the countries consider such equipment primarily a luxury and keep licenses and dollar allocations for imports at a minimum.

In an effort to achieve its goal, the company will furnish its distributors in the 16 countries with material intended to prove that refrigeration is not a luxury, but a necessity. Using this material, the distributors will then confer with officials of their individual governments in charge of granting import licenses and allocating dollars.

Through the distributors, the company will argue that if the large volume of food supplies going to the ERP countries under the \$6,000,000-plus recovery program are to be adequately preserved, a sizable share of this sum should be spent for refrigeration equipment.

Although the manufacturer for a long time has been considering action to increase its refrigeration exports to Europe, it had made no important move up to now because these countries' small dollar reserves "obviously had to be used for importing items other than refrigerators," the export manager said.

No such campaigns are contemplated by either International General Electric Co. or Westinghouse International Corp., according to The Times report. A spokesman for International G-E was quoted as saying that his company believes rehabilitation and recovery of the ERP countries will be hastened more by imports of U. S. capital goods with which they can manufacture such consumer goods as refrigerators.

## New Repair Kit for Coldspots Offered

NORTH HOLLYWOOD, Calif. — Two new products designed especially for repairing Coldspot refrigerators— a set of carbon vanes and a bellows seal for boxes having a <sup>15</sup>/<sub>32</sub> shaft—are now being offered by Mechanical Enterprises here, manufacturer of refrigeration specialties.

The seal is described as a sylphon bellows balanced unit with a steel coil spring with ends ground parallel to supply an even pressure. The seal nose is of case-hardened steel lapped to a micro finish, according to the manufacturer. Price is \$3 in single lots or \$2.85 in lots of 10, the announcement stated.

The vanes are said to be precision ground "to give maximum efficiency and long service" to the Coldspot compressor assembly. Designed to eliminate wear on cylinder wall and rotor slots, they are quiet in operation, it is claimed.

They are available in three sizes (1 in.,  $1\frac{1}{4}$  in., and  $1\frac{1}{2}$  in.) to fit all models. Sets (four vanes to the set) cost \$1.25 each.

#### Dunning Resigns as Superior Agent

PITTSBURGH — Resignation from his post as Middle Atlantic States Representative for Superior Valve & Fittings Co. has been announced by Norman M. Dunning.

A factory agent in charge of sales in his territory for the past three years, Dunning declared that his future plans are indefinite.



## INSULATING FACTS

# FOR COLD STORAGE AND LOCKER PLANT OPERATORS • Whether you are building or remodeling your cold storage or locker plant, you'll find valuable information in this "Hand Book on Cold Storage Construction." It tells how to figure heat loss, how to estimate amount of insulating material needed for a job. It gives helpful details on construction and vapor-proofing. It also ex-

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No rusting. The motor is totally enclosed, permanently lubricated, requiring no oiling.

**EFFICIENT** The radial airflow assures uniform, refrigerator temperature.

SEND FOR CATALOG R-125.

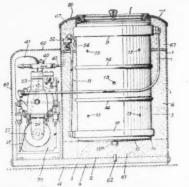
## KRAMER TRENTON CO. Trenton 5, N. J.

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#### **PATENTS**

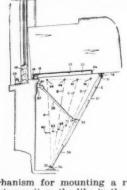
#### Week of February 24 (Continued)

2.436.592. STORAGE CONTAINER AND EVAPORATOR FOR REFRIGERATORS.
Willard L. Morrison, Lake Forest, III.
Application Aug. 14, 1944, Serial No. 549,430. 5 Claims. (Cl. 62—126.)



1. In an open topped evaporator and storage structure for refrigerators, con-centric, generally vertically axised inner and outer cylinders having spacing means therebetween adapted to space them slightly apart, said cylinders being sealed slightly apart, said cylinders being sealed together at their ends to define therebetween an evaporator space and having a bottom member enclosing the storage space surrounded by said evaporator, said evaporator having a circumferential distributor at one end, means for delivering a liquid refrigerant to said distributor and means for withdrawing the evaporated refrigerant from said evaporator space at a point remote from said distributor, said distributor being located adjacent the top of the evaporator, the clearance between of the evaporator, the clearance between said cylinders increasing progressively downwardly from said distributor.

2,436,713. AIR CONDITIONING AP-PARATUS HAVING MOUNTING FOR MOTION RELATIVE TO A WINDOW. Clifford S. Cody, Springfield, Pa., assignor to Westinghouse Electric Corp., East Pittsburgh, Pa., a corporation of Penn-sylvania. Application June 15, 1946, Serial No. 676,935. 9 Claims. (Cl. 98-94.)



1. Mechanism for mounting a room air conditioning unit or the like in the window of a wall, said mechanism comprising supporting means at the bottom of the window on which said unit may slide horizontally into and out of the window, and means for resisting the turning moment of the end of the unit remote from the window when the unit is slid out of the window, said means comprising a link pivoted at one end to the wall adjacent said supporting means and extending downwardly therefrom, a lever pivoted to said end of the unit and to the lower end of said link, and extending downwardly beyond the latter, and means acting on the lever to resist rotative force about the pivotal connection with said link pro-duced by the downward force of the unit on the upper end of the lever.

REISSUES TWO-TEMPERATURE 22,976. TWO-TEMPERATURE RE-FRIGERATOR. Donald E. Dailey, Bryn Mawr, Pa., assignor, by mesne assign-ments, to Philco Corp., Philadelphia, Pa., a corporation of Pennsylvania. Original No. 2430456, dated Nov. 11, 1947, Serial No. 515,950. Dec. 28, 1943. Application for reissue Dec. 4, 1947, Serial No. 789,751. 18 Claims. (Cl. 62—116.) 1. In a refrigerator of the character described as application of the character

described, a cabinet having a main refrigerated compartment, a sharp-freezing located below the

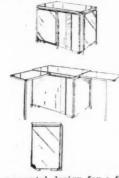
compartment, said sharp-freezing compartment being enclosed at the sides and bottom and having an access opening in the upper portion thereof, a door con-



stituting a common closure for said compartments, and means cooperative with the door when the latter is closed for indidividually sealing said compartments.

DESIGNS

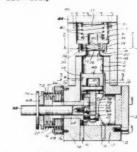
148,762. DESIGN FOR A PROZEN FOOD LOCKER OR SIMILAR ARTICLE. Laurier Carriere, Rockford, Ill.; assignor to The Maytag Co., Newton, Iowa, a corporation of Delaware. Application Nov. 29, 1945; Serial No. 124,201. Term of patent 14 years. (Cl. D67—3.)



The ornamental design for a frozen food locker or similar article, substantially as shown and described.

#### Week of March 2

COMPRESSOR. James J. Corey, Jackson Heights, N. Y. Application May 30, 1945, Serial No. 596,619. 5 Claims.



1. In a high-speed compressor of the type which may be used in a refrigeration system, the combination of, a cylinder block having a cylinder bore with a gas compression chamber at one end and a piston guide portion at the other end, a cylinder head block surrounding the bore in the cylinder block at the end of the gas compression chamber, said cylinder block having a cross-bore at substantially right angles to said cylinder bore and forming a crankcase, a crankshaft mounted coaxially with said cross-bore, a piston and piston rod assembly including a piston mounted in said cylinder bore and a piston rod connecting said piston to said crankshaft whereby rotation of the crank-shaft reciprocates said piston in said shaft reciprocates said piston in said cylinder bore between a gas inlet position and a gas outlet position, said cylinder block having a plurality of gas inlet passageways formed by a plurality of bores substantially smaller than and parallel to said cylinder bore with their axes coincident with the wall surface of said cylinder bore, said gas inlet passageways extending from said crankease to the ways extending from said crankcase to the compression chamber which is beyond said piston when said piston is in its gas inlet position, said cylinder head block having a gas outlet bore which is coaxially positioned with respect to said cylinder bore and is surrounded at its end opposite said compression chamber by an annular valve seat, a disc valve adapted to seat on said valve seat and

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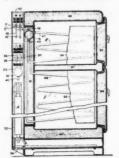
thereby close the gas outlet bore, and a valve retaining assembly mounted in said cylinder head block and resiliently holding said valve disc in seated position.

2,436,866. MECHANICAL SEAL. John Hancaster, New York, N. Y., assignor
Worthington Pump & Machinery
orp., Harrison, N. J., a corporation of
claware. Application Oct. 23, 1946.

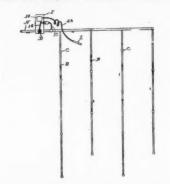


1. In a mechanical seal for a shaft rotating in a fluid containing vessel, a first sealing member, a second sealing member, deformable packing members comprising wedge shaped rings having their wedge faces interacting, a compression member, a spring member, a back-up member for a spring member, a back-up member for said spring member, means for fixing said back-up member to the shaft for motion therewith, each of said members being of annular form with shaft receiv-ing openings and arranged in series relationship, a collar member, said second sealing member being attached to said collar member for movement therewith, means for transmitting rotary motion from the back-up member to the collar member and the second sealing member, said last and the second sealing member, and last mentioned means being constructed and arranged to permit axial movement of said collar relative to the shaft and back-up member, a clamp member for fixing said first sealing member to the vessel, said clamp member fitting about said collar member and having an internal annular groove with an outlet therefrom for draining off fluid leaking through the interacting faces of said first and second sealing members.

2,436,945. TWO TEMPERATURE ABSORPTION REPRIGERATING APPARA-TUS AND METHOD. Otis B. Sutton, North Canton, Ohio, assignor to The Hoover Co., North Canton, Ohio.



1. The method of maintaining a temperature differential in two zones by means of intermittently operating refrigerating apparatus including an evaporator having coils in heat exchange relationship with said zones and in open communication with a common source of supply of liquid refrigerant supplied by said intermittently operating absorption refrigerating apparatus comprising, the steps of reducing the vapor pressure in the coils of the two zones by operating said intermittently operating absorption refrigerating apparatus on the absorption phase of operation to thereby evaporate liquid refrigerant in the coils of each at the same temperature and at a depending upon the load on the respective zones, discontinuing the evapora-tion of liquid refrigerant in the coll of the zone to be maintained at a higher temperature while continuing the evaporation of liquid refrigerant in the coil of the zone to be maintained at a lower temperature and maintaining the same vapor pressure in the coils of each zone. 2,437,156. METHOD AND APPARATUS FOR COOLING BY EVAPORATION. Albion N. Frick, Los Angeles, Calif., as. signor to Prederick G. Bradbury, Los Angeles, Calif. Application July 11, 1942, Serial No. 450,625. 3 Claims. (Cl. 62—6.)



1. The method of cooling a surface by evaporation of a spray of cooling liquid which consists of spraying a thermostatically controlled flow of liquid upon such surface until the temperature influencing the thermostat drops a predetermined amount lower than the opening point and of successively checking. ing point, and of successively checking and releasing the spray of liquid in the meantime to cause successive flashes of evaporation of the liquid sprayed upon the surface independently of said thermostatic control.

#### Correction

Patent of the Hoover Company for an ice tray, Reg. No. 9,123, appearing in OFFICIAL GAZETTE of February 17, 1948, as Pat. No. 1,993,614, should bear Pat. No. 1.933.614.

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WANTED: SALESMEN, factory representatives—calling on dealers. Splendid opportunity—for modern "sink high" re-frigerator with space-saving work-top. Very popular. Big dealer demand. Commission basis. Exclusive territories. Write giving experience, lines carried, territory covered, references. MOSS ATLAS CORP. 244 Herkimer St., Brooklyn 16, N. Y.

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EXPERIENCED COMMERCIAL salesman and Connecticut, must have car. Wholesale only. Generous drawing and commis sions with established distributor for major lines. Exclusive. BOX 2798, A BOX 2798, Air Conditioning & Refrigeration News.

WANTED, FIRST class refrigeration man to take full charge of group of stores doing business in Flint, Michigan for 28 years. Must have background of long experience in home freezers and domestic refrigeration. Salary commensurate with ability. Write full details of qualificaability. Write full details of qualifica-tions, experience, and salary expected in

first letter. Write BOX 2802 Air Conditioning & Refrigeration News.

WANTED: SALES Engineer on commer cial refrigeration, air conditioning and ventilation. Must be able to estimate and layout his own work. Should be college graduate in mechanical engineering and have at least five years field experience. Compensation open. Our employes know of this ad. BOX 2804 Air Conditioning & Refrigeration News.

REFRIGERATION ENGINEER: Nationally known refrigeration manufacturer has opening in Chattanooga for engineer with about three years experience in com-pressor design, development, and manufacture. Permanent job; salary commensurate with ability. Write full details of qualifications. Enclose two photos (not returnable). BOX 2812 Air Conditioning & Refrigeration News.

MANUFACTURERS SALES agents wanted to represent reliable manufacturer of high quality Freezers and Milk Coolers. Applicants must have a proven record in the sale of commercial refrigeration. State age, experience and location prefer-ence. BOX 2818 Air Conditioning & Refrigeration News.

#### EQUIPMENT WANTED

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VALVE BARGAINS! VALVE BARGAINS! 2\%" Wing cap globe, Kero. 461S—\$19.76. 1\%" Packless Globe, Kero. 455S—\$21.60. 1\%" Wing Cap Globe, Kero. 455S—\$21.60. 1\%" Wing Cap Globe, Kero. 574S—\$9.50. 1\% IPS Iron Body W. C. Globe—\$6.00. \%" Angle, pkls., Kerotest 6981S—\$3.00. \%" Receiver valves, Kero. 2355—\$.75. \%" Relief, Kerotest 51-S-300\pm=\\$3.45. \%" SAE packed globe, with handwhl.—\$.85. Orders over 100\pm prepaid. ANCHOR SUPPLY CO., 1742 4th Ave. So. Seattle 4. Wash. 21/6" 4th Ave., So., Seattle 4, Wash.

SEALED UNITS rebuilt and exchanged. Prompt service on Coldspot (sealed & semi-sealed) Chieftain, Gale, Tecumseh, Norge and many others. One year guarantee. Write for price list and shipping instructions. BRIGHTON, 16640 Log Cabin, Detroit 3. Mich.

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4 & 1 HP Amco Weathermakers \$175 & \$195. 15 HP Larkin Evaporative Condenser \$795. The following less motors: ½ HP Crew & ¼ HP Copeland units \$39 each; ½ HP Universals \$49 each. All new crated. PILGRIM REFRIGERATION CO., 48-20 43rd Ave., L. I. City, N. Y.

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SEALED UNIT stators. We rewind stators for Norge, Westinghouse, Crosley, G. E., etc. refrigerators, (domestic). These stators conform to factory specifications and will stand up under a 2000 volt ground test. Price per stator \$9.00 F.O.B. New York. Prompt Service. Guaranteed workmanship. L. SELZER CO., 362 Vermont St., Brooklyn, N. Y. DI—6-2745.

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REBUILD YOUR own sealed units. Send us your burnt and stuck up heads and they will be immediately replaced from our stock. Send for our complete price list. TECHNICAL REFRIGERATION SPECIALIST'S, 362 East 180th Street. Bronx 57, New York.

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#### BUSINESS OPPORTUNITIES

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COMMERCIAL REFRIGERATION, all conditioning, stoker & oil burner sales & service. Established 17 years. Nationally known franchises in all lines. Act now service. Established 17 years. Act known franchises in all lines. Act wards of \$60,000.00. BOX 2815 Air Conditioning & Refrigeration News. lack the 1 teacl of t perso subje look econe back

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#### MORE EDUCATION CAN MEAN GREATER MARKETS

Chico, Calif.

Your quotations from Abraham Lincoln in the Inside Dope of the Feb. 16 issue brought on the following

#### LET'S TALK UP OUR EDUCATIONAL INDUSTRY

It seems that in an attempt to cure the troubles of the world we have upheld and condemned nearly everything which was convenient to lay our hands on. Yet it appears to me as if we have neglected a now small but most influential source of todays troubles and will be the source of cure or lack of cure for the difficulties of tomorrow. With the powerful destructive forces which man has learned to use, it looks like suicide to follow the paths we have taken up to now.

Some one said that what men do is the result of their environment and what they did when they were boys. It would seem that the education which they had would be one of the major if not the most important influence upon their thinking or lack of thinking and their methods or lack of methods of work throughout the rest of their lives. It seems that teachers often teach as much or more of their own habits, attitudes and personalities as they do of their subjects.

If then we keep this in mind and look at our labor and political and economic trouble today and then go back into the popular school subjects and how they were taught in the

EDWIN P. ANDERSON

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'20's & '30's as well as the trend of the popular subjects it would have been easily possible to predict the 1948 result. A look into such a crystal ball now

scares me. It seems almost as accurate as producing a chemical substance by the addition of definite elements and treating by a definite process. Our habit of putting aside the educational system and holding down the amount of expenditure in this direction has caused education to draw away from reality.

It reaches bookkeepers, stenographers, and white collar workers with little or no coordination or evaluation of that work toward the total functioning of a business or industry. Instead of teaching a respect the tendency is to teach a down right disrespect for skilled manual trades and skilled workmanship. The result of this is shown in the trend of forcing the wage levels of the unskilled and semiskilled to nearly the level of the most skilled and indirectly holding the skilled wage down. The tendency of this will be to eliminate skilled workmanship by the loss of an incentive to do better.

In other words it seems if we want a brighter future it will be necessary for us to put our greatest possible effort behind our educational industry. We will have to put into it the ingredients of the product which we wish to take out. If we want people who think for themselves instead of listening to the loudest propaganda then there must be taught less confusion and rubbish and more taught on how to think. More of the fundamental laws of mathematics should be taught since the laws of accurate thinking are the laws of mathematics (Steinmetz).

And since "No student knows his subject but the most he knows is how to find out that which he does not know" (Woodrow Wilson) then remove the clutter of soon forgoten details and add more of the how to find out the unknown.

If we want more people who can do and desire to do more things we must put more and better manual training equipment in schools for use of students earlier. And also add more and better teachers to teach it. Would not this investment return in increased markets as well? If we want more personality then more personality will have to be added.

In short regardless of what laws we can pass or what else we do, what chance is there for improving anything permanently as long as education is given a back seat? Is it not mainly the average of the thinking of the people that make, change, and enforce the laws and make things exactly as they are?

If it is that important is it not time to put everything behind the industry of education and talk it up, advertise, and boost it until it ranks first place? It will cost a lot of time, money, and the best of men, but the lack of it may cost many times more.

Does this industry not deserve to be raised from about 31/2 billion annually to from 10 to 15 billion annually? (add a little more and air condition the schools, too).

LEONARD N

#### DEALERS NEED TO PUSH 'ELECTRICAL LIVING'

Fuelane Corp. Liberty, N. Y.

Editor:

We read the article, "Utility Men Hit Failure to Push Electrical Living," by John O. Sweet with a great deal of interest and would like to have your permission to photo offset reprints of it for our dealers. with the understanding that we will give a credit line to your publication.

> THE WATCH DOG

HAROLD J. BATSCH,

#### FREEZER SELLING TIPS HIT 'NAIL ON THE HEAD'

International Harvester Co. 180 North Michigan Ave. Chicago, Ill.

The writer found the guest editorial of your April 26 issue very timely and to the point. In writing 'If I Were A Dealer" W. Paul Jones certainly set down the important and primary essentials in the merchandising of freezers.

I would like to mail clippings of this editorial to five or six of our overseas distributors on refrigeration and would, therefore, like as many reprints or extra copies of your magazine as are necessary to do this

Once again, congratulations to Mr. Jones who certainly hit the nail on the head in your April 26 issue.

> R. J. MCMENAMIN, Export Salesmanager, Refn.

Tyler Fixture Corp. Niles, Mich.

Editor:

Several of our agents have written in inquiring as to the possibility of getting some reprints of a very fine story on home freezers, that appeared on the front page of the April 26 issue of AIR CONDITIONING & REFRIG-ERATION NEWS.

If it is possible we would like to have about 50 copies.

> J. B. HENNION. Sales Promotion Mgr.

General Electric Co. Appliance and Merchandise Dept. Bridgeport, Conn.

In your April 26 issue you had an editorial by W. Paul Jones, "If I Were A Dealer," which we liked so well we would like to reprint and circulate it among all our dealers.

STANLEY C. SCHULER

#### Correction

Dade Refrigerating Co., Inc., Miami distributor of commercial refrigeration equipment, calls attention to the need for some explanatory information and corrections in the article 'Miami Supermarket Saves Time and Space" which was published on page 12 of the May 3 issue.

Writes J. R. Turpin, head of the Dade company:

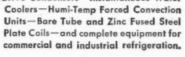
"Under the picture used in connection with the story it is stated: 'The cases moved together provide a selfserve bank 32 ft. long.' These cases are made in 6-ft. sections and are joined together to make one continuous fixture. In this instance there are six cases making a total of 36 ft. of cases. Three fixtures are joined together, making one section 18 ft., and another section of two fixtures are joined together, making a section 12 ft. long, and then a single fixture 6-ft. long joins up to the end of the 12-ft. section, on another angle.

"Then the last paragraph of the story says: 'Because of the extreme height of the three-tier fixture, simple step-up platforms have been constructed every few feet to allow short women to reach into the upper tiers conveniently.' This is absolutely not true. There never have been any platforms in front of these cases at any time because the two refrigerated decks in this case are easily accessible to even the shortest women. The top of the case is 56 in. from the floor, which is about the average eve level, and merchandise on that shelf is easily reached.

"This statement is borne out by the picture of the woman and child in front of one of these cases, which plainly shows the woman's chin about on the level with the top of the case. The superstructure on this fixture extends 20 in. above the top of the case."

#### FASHIONED FOR FUNCTIONING

Even the handsome, engineered good looks of Larkin refrigeration products contribute to their fine performance. The originator of the Cross Fin Coil also offers you matchless quality In Air Conditioning Units-Evaporative Condensers-Instantaneous Water







#### FOOD-SAVING DATA WILL PROVE 'FREEZER STORY'

International Harvester Co. 168-178 Wealthy St., SW Grand Rapids, Mich.

It would be appreciated if you can furnish any information proving the value of a consumer owning a home

In an endeavor to promote the sale of home freezers, we are trying to assemble facts proving a housewife saves money by purchasing frozen foods in quantity and storing them in a freezer or by freezing them herself as compared to the housewife who purchases food on a day to day basis

> ROBERT A. MORRIS, Refrigeration Representative

Answer: Page 16 of the Feb. 23, 1948 issue offers an article entitled Savings Chart on Frozen Food Purchases In Quantity Boosts Home Freezer Sales." It gives in detail some of the savings that may be effected by quantity purchases.

#### LEFTISTS ENDEAVOR TO CHOKE FREE ENTERPRISE

James Refrigeration Co. Cuba, Mo.

Editor:

You certainly have the 100% correct Christian, American slant on those foreign slime-spawned isms. As I see it, too, Communism is today trying to choke out the beautiful growth of American free enterprise and individual initiative by fostering the rank spread of the noxious and sinister weeds of left-wing trade unionism

VIRGIL C. JAMES

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#### Water Conservation - -

(Concluded from Page 1, Column 2) the installation or use of any air conditioning system. Small units, such as may be installed to air condition a residence, will not be compelled to include a conservation device but all large units, for factory, store, or commercial use, will have to have a conservator.

Not only do air conditioning systems increase the use of water enormously, Schlueter said, but they also place extraordinary demands on sewers not adapted to such usage.

"My ordinance," Schlueter said, "is in many respects patterned after similar ordinances in New York City, Philadelphia, Detroit, Newark, and other large cities."

The water-savers under the ordinance are strictly limited as to the amount of water they may use. While expressed in technical terms in the ordinance, the restriction would operate to save up to 95% of the water that would be required without their

Permits will be issued by the city water superintendent with fees to be at the rate of \$2 per \$1,000 cost of construction, up to \$100,000 and \$1.50 per \$1,000 in excess of \$100,000.

The ordinance recognizes that a reasonable period will be required to obtain and install the conservation devices in that it provides: "Temporary permits for use of existing air conditioning units during 1948 will be issued with the condition that, until equipped with water conservation devices, use will be discontinued of the air conditioning system whenever ordered by the Public Works Commissioner."

The ordinance also provides that installation shall meet all city and state health and safety requirements. Schlueter declared that a survey disclosed that many air conditioned premises use 25 times more water in summer than winter. Under conventional procedure, he said, the water simply flows through the system and down the sewer.

#### **GM-UEW Agreement--**

(Concluded from Page 1, Column 3) tofore advanced its wages as rapidly as the cost of living had risen. General Electric has already advanced its wages more than 70% since 1940 -this being more than the 69% by which the cost of living has advanced. G-E believes this will be found to be generally true in the electrical industry."

The GM-UE wage formula provided for the increase of 11 cents per hour, of which 3 cents represents an annual improvement in the wage rates and 8 cents a cost-of-living adjustment. The contract calls for an additional 3 cents per hour which will be added to the base pay for all eligible employes, starting May 29, 1949, to improve the then existing wage rates.

During the entire period of the contract, there will be quarterly adjustments in the cost-of-living factor based on the Consumers Price Index.

#### ASHVE Meeting Plans-- Redden Will Direct

(Concluded from Page 1, Column 4)

ing the committee on research. At the annual banquet, slated for Wednesday evening, members will hear an address by Laurence Whittemore, president of the Federal Reserve Board of Boston.

Advance program for the meeting gives the schedule for presentation of technical papers as follows:

#### MONDAY, JUNE 21

Theme: Physiological Factors In Air Conditioning

"Sanitary Significance of Ventilation" by W. F. Wells

"Mount Washington Weather Conditions" by Donald B. Chapman "Thermal Insulation of Clothing"

by C. P. Yaglou "Comparison of Physiological Adjustments of Human Beings During Summer and Winter" by Nathaniel

Glickman, Tohru Inouye, R. W. Kee-

#### ton, and M. K. Fahnestock. TUESDAY, JUNE 22

Theme: Heat Storage

"Ground Temperature Distribution with a Floor Panel Heating System" by A. B. Algren

Source for the Heat Pump" by L. R. Ingersoll and H. J. Plass

Theory of the Ground Pipe Heat

"Fan Selection by Use of Constants" by A. C. Stern and Leon Horowitz. WEDNESDAY, JUNE 23

Theme: Solar Heat Transmission "Hydraulic Analogue for the Solution of Problems of Thermal Storage, Radiation, Convection, and Conduction" by C. S. Leopold

"Calculation of Solar Heat Gain Through Walls and Roofs for Cooling Load Estimates" by J. P. Stewart

"Solar and Total Heat Gain Through Double Flat Glass" by G. V. Parmelee and W. W. Aubele.

#### Guide Is Published on Electric Heating Methods

PITTSBURGH-A practical Guide to the design and installation of electric heating for homes for contractors, architects, builders, and engineers has just been released by the Westinghouse Electric Corp.

The new 42-page illustrated manual, "Electric Heating for Homes," reduces the complicated procedure of designing an electric heating system to the simple process of selecting the required heating capacity for a given room from the proper chart.

The charts are easy to use and take into consideration such factors as floor area, window area, double or single pane glass, various degrees of insulation and the number of exposed walls. The new Guide also includes easy-to-read information about the selection, the location and the installation of both wall and floor model unit heaters; determination of wire size for electrical circuits; and climatic information covering various parts of the country.

A copy of the Guide, (B-3768-A) priced at \$2.00, may be secured from any Westinghouse Electric Supply Co. office or other distributors.

## Crosley Advertising

CINCINNATI — Ellis L. Redden has been named director of advertising and sales promotion for Crosley Division, Avco

Mfg. Corp. Redden joined Crosley last No-Redden vember as manager of sales promotion and training. Previously, he had been in the same capacity with Norge appliances, and merchandising contact with McCann-Erickson Advertising Agency, New York office, on the AGA and Stromberg Carlson

E. L. Redden accounts.

He will be responsible for all advertising media, sales promotion, and training programs.

#### Furniture Orders In First Monthly Drop

GRAND RAPIDS, Mich. - New furniture orders placed during April were down 17% from April, 1947the first time in three years that a decline in orders from the previous year has been registered by the furniture industry.

Seidman & Seidman, accountants and analysts for the industry, however, termed the drop not serious in view of "seasonal circumstances." They reported it to be a continuation of a slackening activity in the furniture industry started in February.

New orders for the first quarter of the year were up 17%, they noted. Shipments for the first four months of the year were 22% over the same period last year with a record volume being shipped in March.

Cancellations during April amounted to 24% of new orders, which is considered a high rate. However, the dollar volume of cancellations was about 25% less than in March. Backlogs of orders were down somewhat.

#### **New Giant Drug Store** Gets Air Conditioning

INDEPENDENCE, Mo.—Complete air conditioning is planned for the new giant drug store to be opened here by the Katz Drug Co., Earl S. Katz, president, has announced.

The store will have three floors of retail sales space which will total 22,000 sq. ft. An existing two story building is being remodeled to house the new Katz unit, the 27th in the company's chain. It is expected to be ready for business by October.

#### -- and an Auto Dealer

MEMPHIS, Tenn. - Mills-Morris Co., automotive parts and equipment here, has completed installation of four 5-ton Chrysler Airtemp air conditioning units in its merchandise display building.

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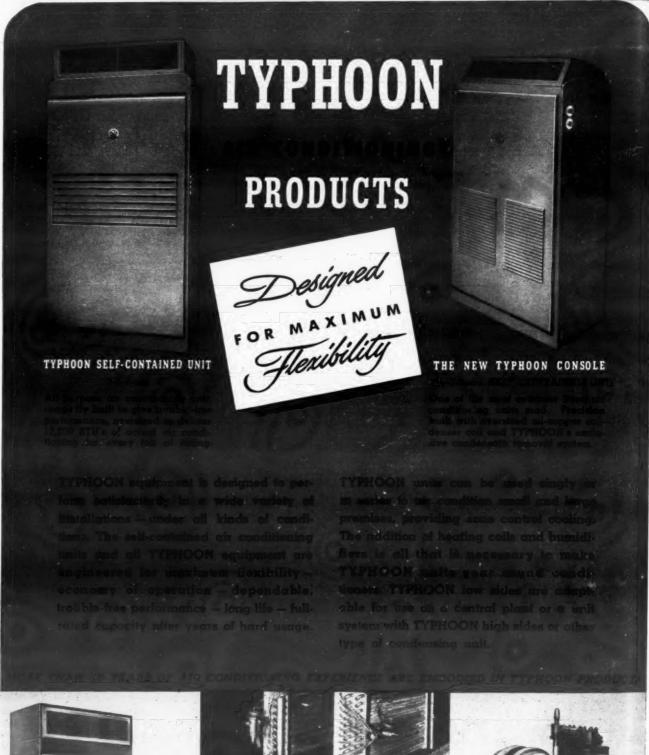
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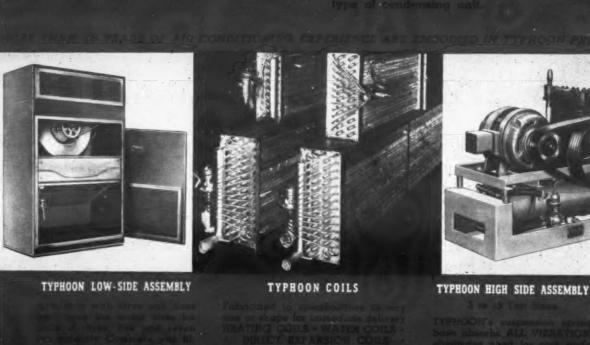
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#### -- and an Ice Cream Store

ROCHESTER, N. Y. - Larry's Restaurant, 43 Stone St., and the Cupid Ice Cream Shop, 630 Monroe Ave., have been air conditioned.





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